



Cloud Solutions And Its Applications In The Real World

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Abstract:

Today large no. of data is generating every point of minute in every sector of the real world. All are of the opinion to have computing systems at their finger prints right time. Cloud computing is a kind of revolutionary technology trend today which is a part of Distributed systems for global access of data & to generate information in the various fields for further decision making & processing. Today there strong need to work on the predictions by using various statistical techniques for business growth & to generate the revenue by the real world enterprises. Here we have mentioned about cloud solutions by the different companies listed below. As it is the recent trend for the developers are researchers specially educationist & students some of the proposed broader areas viz. Science disciplines, Sports, engineering & business sectors in the real world are mentioned. Performance measurement is one of major variant in the economics & optimization. We have mentioned certain parameters for further research & studies by using different cloud solutions.

Keywords : Cloud Computing, Data Analytics, Business Enterprises, Performance, Global access

1. Introduction

Cloud computing is a platform where there on-demand availability of Computer hardware & other resources. It is a kind of cloud based data storage in data center. Large clouds, predominant today, have functions in terms of distributed multiple locations from central server.

Cloud platform based applications may be limited to a single company or enterprise, which can be made available to multiple organizations by using public cloud. Cloud computing relies on sharing of different resources to get coherence and scaled economically. In this paper the authors are aimed to mention various computer based solutions using the cloud computing as platform but which are the tools of cloud computing like Amazon, Google & Microsoft enterprise and other companies in short. Today cloud computing & cloud solutions are the recent advancements in the computing in corporate

world where there huge generation of data viz. railway reservations, stock market, healthcare sector, insurance, education, e-governance systems of both state & central Govt. Distributed systems [1] and their specific applications have evolved significantly over the years. We found that there is significant increase in network/bandwidth capabilities. It is time for usage of cloud computing environments

Characteristics of Cloud computing :

Following are the some of the characteristics of the cloud computing [5]:

- On demand Self Services
- Broad network access: Better Computer network support
- Resource pooling : Hardware devices can be shared globally
- Rapid elasticity : Ability for scaling applications on demand
- Measured service : Measures for the services

As the cloud solutions are uses different computer networks which can be wired as well as wireless [2]

The Service Models are :

The three vital service models [7] of cloud computing are as indicated:

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

2. Companies and Cloud Solutions

Major cloud solutions providers are not limited but we tried to mention for startups, enterprise based solutions & small businesses are. Some of them as top ten are [12] Amazon web service, Google cloud, HP, Microsoft azure, Digital ocean, IBM Bengaluru India, CISCO systems, vMware, Sify, CtrlS, Rackspace. This is not limited, now days being the new platform for the studies & computations many professionals & researchers are under going for this kind of designing solutions.

Cloud Solution based Applications Business :

Following are the various areas where cloud solutions based software systems can be designed and developed in future. These broad areas are :

- Humana Resource Management
 - Corporate Governance
 - Marketing Management
 - Data analytics
 - Busienss Analytics
 - Laws
 - Production Management
 - E-Busienss
 - Accounting
 - Economics
 - Sports
 - Entertainment Indistry
 - Stock Exchange
 - Internal Business
 - Rural Development & Administration

This is not limited but there are plenty of good options[11] as platform solutions, where management of organizations will certainly want to establish globally available IT solution on wireless device such as Mobile phone in order to satisfy the needs of the users in the real world.

3. Applications :

Applications is a broader term which has multiple views in the software industry & business world. The lay man who uses the computer & completes his/her task is a kind of computer application. Whereas software professionals makes use of various computer applications to develop the systems & solutions useful for day to day activities in the business world.

Some of the broader applications in real world and useful for the computer professionals which are mentioned in the [13] are :

- Artificial Intelligence
- Cloud computing
- Robotic Process Automation
- Business Analytics
- Block Chain
- Mobile & Tablets
- Internet of Things (IoT)
- Web App Development

In addition to the above, major cloud computing platforms viz. Microsoft, Google, IBM & Amazon are having different applications for the cloud computing & some are the cloud solutions.

Applications of computer based systems are not limited but we focus on the business applications as well as the scientific also.

Scientific computing applications may include role of science subjects such as Mathematics, Statistics, physics, etc along with various engineering fields viz. Civil, Electrical, Mechanical & many other where there is wide important to do research and make use of cloud based systems for the future developments.

Corporate & business applications can be in the following major categories:

- Human Resource Management
- Corporate Governance
- Marketing Management
- Data Analytics
- Business Analytics
- Laws
- Business Organization
- Production Management
- Business Communications
- International business
- Healthcare
- Insurance

4. Performance Measurement :

Measuring a performance includes many parameters [3] but one may focus on Hardware performance, Network performance, Software Performance & service providers variable in the usage region or city. It is observed that in distributed technology perspective, cloud computing most like client-server services are web-based or web-service but they are used as virtual resources. Presently cloud computing based on the use of an elastic virtual machine (VM) and the kind of network for data communication.

The future researchers can set perform an experimental setup & study the quality of service received from users - customers.

Parameters can be average response times and the number of requests time out, version of operating system, time of service request, type of Internet Service Provider (ISP), platform in which the software is developed and many others can be thought as per the researchers interest & requirements for future studies.

Different statistical techniques & methods for performance measurement can be categorized depending on the complexity and need. For further analysis one can categorize these techniques into basic parameters such as means and percentile, correlations and clustering.

5. Summary

The paper describes in brief information about the cloud computing & its solutions in the various fields of Software specializations or fields of studies like Artificial Intelligence. We also mentioned various areas in science, technology, business and other sectors like Insurance, medical, etc. Paper also states about kind of the performance to be measured in future by the research community for further developments.

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