

Distributed and Cloud Systems Programming (5CS022)

Student Id: 2227097

Student Name: Radhika Neupane

Group: L5CG10

Module Leader: Deepson Shrestha

Submitted To: Deepson Shrestha

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Table of Contents

1. Introduction.....	1
2. Comparing Cloud system with Traditional system.	2
2.1. Performance.....	2
2.2. Cost.....	3
2.3. Reliability.....	3
2.4. Security	4
3. Conclusion.....	4
4. References	5

1. Introduction.

Cloud system refer to the approach where different kinds of services are transferred using internet. Rather than using various kinds of local infrastructure and physical resources, it takes the advantage of remote servers along with networks in order to produce retrieve to different kind of tools/applications. It also authorizes users to supply their data by terminating local storage devices need. It permits for additional workable and low-cost approach to computing resources. (FRANKENFIELD, 2023)



The process of hosting a website on a single approach is known as tradition hosting. It is also believed that it is one of the best and well-established reliable approach. It has finite elasticity and it uses various kinds of local infrastructure and physical resources. If any kind of organization or business requires control over their hardware and a software, then they use this kind of hosting method. But unfortunately, this kind of hosting is quite expensive and lacks cloud-based scalability and flexibility. (Hartshorne, 2023)

2. Comparing Cloud system with Traditional system.

Here hosting system i.e., cloud and traditional system are compared on the basis of



2.1. Performance

Cloud system is quite flexible and malleable which allows resources to scale according to the demand which ultimately helps when a sudden conflict arise in traffic and also resource demand without even hampering its performance issues. It also provides flexible resource allocation ensuring that resources are distributed and utilized across various applications. It completely minimizes the distance of the data which need to travel and this leads to improvement in performance level. On other hand traditional system need hardware upgrades/ physical servers due to which performance leads to repose. As we

know that servers are used in this traditional system so there may exist geographical limitations too. (Ravella, 2023)

2.2. Cost

Talking about cloud it maintains its IT infrastructure on its own so any kind of organization is not required since each and every thing in cloud is accessible as service. Traditional system requires hardware and backup solutions meanwhile cloud doesn't require since they will ultimately be included in their cloud service offering. Traditional system needs IT experts who are specialized in their field in order to maintain, manage and ensure security, performance and system of the system so it results to more cost. Likewise, cloud completely eliminates the need of any organization/ such things, it's all responsibility is shifted to its cloud service provider which ultimately leads to reduction of cost. Cloud is large in scale and ensures that the resources are used wisely along with proper cost optimization. (Ravella, 2023)

2.3. Reliability

Reliability is essential factor when we compare cloud system and traditional system. It refers to the system whose functions work consistently to access the resources without any kind interference or disturbance in it. Cloud increases abundance which allows users to sympathize with each other. Cloud also offers limitless storage on condition that we can offer it, which completely eliminates the storage problem. Cloud ensures the reliability of their services by enhancing the distributed nature. It also has various tools which helps monitor the performance along with data backups and replications to restore the data. Talking about traditional system it may lack the reliability as compare to cloud system. The risk of disruptions and downtime period of services can be seen in traditional system as it relies on limited resources. Traditional way allows to access data only on the system

i.e., from specific but in cloud data can be accessed anywhere at any time. (Qualisystems LTD , 2023)

2.4. Security

Even though cloud system and traditional system have different approaches regarding security. Cloud have dedicated teams to ensure the security but since the uses of internet cloud can even experience internet related risks such as a hacking and eavesdropping. But to minimize these sorts of things cloud system mainly focuses on the encryption of data, control its access and also helps in data backup automations. Even so in traditional systems security, firewalls and antivirus software are handled by organizations. It put forward full control but installation, resource scaling and maintenance results to high in cost. (Talab, 2021)

3. Conclusion

To sum up, Cloud system seems to be more cost-effective and convenient as compared to traditional one. Cloud offers more storage spaces and servers which helps to run in speedy and productive way. Even though of many advantages cloud uses internet so if, there is no access to any internet then we can't even access to the cloud. Also, we know that the we don't have control over cloud so we should fully depend on the cloud provider in any unforeseen event, which will affect the productivity and efficiency. The connection of the details also can be spited when using cloud computing. There are certain organizations too which preferred the services, level of control and customization provided by traditional systems and which have specific security needs/IT infrastructure. It's very important that no thing is perfect using specific systems depends on the need and requirement of an organizations/business.

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5CS022

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