

# The influence of multi cloud strategy

Sasikanth Reddy Mandati<sup>a</sup>

<sup>a</sup>Charles Sturt University, Department of Information Technology, Melbourne, Australia

## Corresponding author.

Correspondence: SasikanthReddy  
Mandati

E-mail:  
sasikanthreddyspartan@gmail.com

## Abstract

The study describes the architecture of multi cloud strategy in the IT and computer sector. The study provides the techniques which are involved in the cloud strategy, its usages and importance in the growing world. The study also highlights the working and elements involved in multi cloud strategy along with the future applications of it.

## Article info

Received 12<sup>th</sup> October 2020

Received in revised form 18

November 2020

Accepted 22 November 2020

## Keywords

Multi cloud , Cloud Application,  
Architecture of cloud, Computing

## 1. Introduction

The best method of architecture that deploys the board of multi cloud strategy is cloud balancing architecture. The cloud balancing refers to the balance of work load, this is the process that uses for distributing the workloads across the cloud [1]. The work load is distributed along with the required resources across the computing environment of the cloud. The load balancing is the good method of managing the resources across different computers in the cloud environment. By distributing the resources, the system can also perform the particular work which is assigned to them in a perfect manner. Such a cloud architecture is required for the department of spatial information which can support the board of multi cloud strategy. The cloud balancing system not only performs the operation efficiently but, also reduces the cost that is associated in each of the systems in the cloud architecture [2]. It reduces the cost of document management system because the system wants to manage only the small amount of work documents which do not consumes more cost and not involves much complexity. This approach will makes the data easily available to the people when required. As, the server need not to search the particular data which is required by the customer among the large volume of data.

This in turns increases the satisfaction of the customer. The cloud balancing architecture helps the DSI to deliver the required data about the space to the appropriate users like individual peoples and also to the government [3]. The data which is resigned by the cloud balancing architecture will be highly reliable and easily available to the user. This is also related to the micro service architecture which is also performs the resource operation in the same way as the cloud balancing architecture. This may help to achieve the business goal of the system application [4]. Cloud balancing architecture will help the DSI to improve its goal which is to provide the reliable spatial information to the public.

## 2. Some more information

The scaling can be done very efficiently in the DSI using cloud balancing architecture. This is due to the resource which is distributed across the multiple resources and the servers. It adopts the technique of load balancing and optimize the IT resources.

DSI is a state government system which is required to deliver the large amount of spatial data with better performance [5]. For this purpose the DSI adopt various technologies and application resources to deliver this large amount of spatial data to the users with availability and reliability. The online application

that is used by the DSI to deliver the spatial data is referred as online spatial delivery system. The cloud balancing architecture will provide all the features required to the DSI system. DSI should also needs to store the data for a long term which can be referenced later. The cloud storage is usually very large enough to handle the large data. Actually all the large organizations and the business topologies will move to the cloud architectural storage. The cloud is the large memory which enables the efficient storage to the data with better security [6]. The DSI should store the data with privacy and it can make use of the spatial data at any instant. Hence, the cloud balancing architecture is the best way of handling the spatial data through the cloud network.

The cloud balancing architecture will reduce the data traffic in the cloud network. It avoids the cloud to send the data that is slow down [7]. The proposed infrastructure is based on the cloud. The main intention of the architecture is to ensure that every computing resources can handle the tasks quickly and efficiently. Cloud balancing architecture can be deployed in the DSI system due to the reason of its scalable and the secure internet services architecture. It divides the workloads across different systems and their computing properties [8]. It is very helpful for the DSI system especially in the work demand situation. When the resources are in demand in the network the cloud balancing architecture will distribute the resources across the different system.

Every system resource has to meet the task request which is present in the cloud data center. In the DSI system it deploys the task using the IAAS approaches in the physical host of the online spatial delivery system.

### **3. Techniques**

The concept is that you start with one cloud but eventually extend your storage and bandwidth capabilities. This would provide value to your customer by bringing you more money in your next bill. The technique of Multi Cloud Strategy is fairly easy to understand. It is a way to keep adding value to your customers by having one company infrastructure to add on to. So you have your network and server software for your server and your storage. You can also add a number of different companies on to this infrastructure [9,10]. So instead of your infrastructure to work just for one company you have a way to work just for you.

There are a number of ways to handle multiple cloud strategies.

- One of the easiest is to just work for one company and then add a number of companies onto it. What you do is just add the companies and leave them alone and then when you make money off of the cloud you just leave the extra money on the edge and hope that it stays. This works really well because you can scale your new customers up easily and leave the old customers on the edge.
- Another method of Multi Cloud Strategy is to just leave one company and expand the infrastructure on to the edge. You can also hire subcontractors that you use to add on to your data center and storage as well. This way you have the infrastructure and storage you need at your fingertips, while the subcontractors are running around doing business deals for you.
- A third method of Multi Cloud Strategy is to really branch out and go from coast to coast. You can even hire a bunch of people from one location to expand your data center infrastructure and storage. This allows you to handle multiple continents and still maintain the same quality of service. This kind of Multi Cloud Strategy works the best for large organizations, because they can afford the cost of moving all over the place.

Multi Cloud Strategy is a great way to provide value to your customers. You can also still add on to the network infrastructure and add more layers of storage. This way when the expansion becomes necessary you can just add on or scale back as needed. The technique of Multi Cloud Strategy is a great way to add value

to your customers and help you create a bigger customer base. There are many benefits to utilizing Multi Cloud Strategy. The most important benefit is your customer base is expanding. You will be able to serve even more people in a more affordable manner. It is a great way to create a larger customer base in a more affordable manner [11].

A Multi Cloud Strategy is great if you are looking to run multiple clouds and run all the services from one location. You can also still add services from various locations and also offer something special for existing customers. If you are looking to help customers you can start this strategy and add a lot of value to customers while also being able to grow.

#### **4. How Multi cloud Strategy works**

It is hard to know exactly how the new theory of the cloud works because this is a field of study that no one has been able to define. The best thing to do is to just have a good understanding of what it is and how it works. After you know how the cloud works and how it applies to your business, then you will be better equipped to figure out how to implement it in your business. The cloud strategy works best when there is a collaboration between IT and its clients. This means that the client has the ability to deploy the technology for their business. This collaboration is accomplished through infrastructure as well as service agreements.

In some instances, the IT team will procure the hardware and the client will deploy it and use it onsite. In other instances, the IT team will provide a hosted solution that is powered by a cloud provider. Both options are fine if the two parties are able to work together to determine what the total cost will be.

- When you choose a managed hosting solution and you choose multiple cloud providers, you are paying a lot more than when you are using just one provider. As the number of cloud providers increases the monthly costs of owning and maintaining the server increase. This is also true when multiple providers are used.
- The third aspect of the cloud is service provisioning. With cloud service provisioning you can determine how much bandwidth you want for your business and how much storage you need. Some cloud services provide very generous service plans that include unlimited space and unlimited data transfer. This is the reason why it is very important to have proper billing and usage policies in place before any such agreement is made.

If you are in charge of running a business and you don't really know what it takes to do things then it is important that you hire someone who is qualified to do so. When you hire someone, it is important that you only hire them if they are going to take care of all aspects of managing the cloud and using it for the benefit of your business. You should never go into contract without having a plan for who will handle the implementation costs. Cloud strategy is the new wave in the use of technology for business. It is quickly becoming the preferred method of collaboration between IT and the client. There are plenty of great benefits to using cloud technology. With cloud strategy it is possible to get rid of cost and time. This will also help you make money faster [9].

#### **5. Key elements**

Multi cloud strategy can include the inclusion of multiple clouds to allow users to gain complete control over their infrastructure. If a cloud vendor has a great idea for a new feature that is available in multiple clouds, it is imperative that the idea is included in the Cloud strategy for that particular cloud. Unfortunately, many clients ignore this important aspect of multi cloud strategy and end up having several clouds that use each other's features, thereby losing users and revenue.

1. The first of the key elements of a multi cloud strategy is to create a foundation for the various clouds. The purpose of this is to ensure that you know how your platform will interact with the various technologies. Therefore, the cloud vendor should have a team that is familiar with the technology of

your company and helps you determine how it will function with all of the various vendors. A good vendor should offer this at no cost.

2. The second key element of a multi cloud strategy is the integration of the cloud. It is very easy to integrate one technology with another, but what if you need to add a new service or feature? As we all know, there are thousands of different technologies, including database, application servers, operating systems, and browser technologies. It is quite possible to integrate services and features from many technologies.
3. The final key element of a multi cloud strategy is defining your needs. The cloud will never be fully available until you understand what it can do for your business. After all, you will be integrating some services that are only available in certain clouds.

## 6. Future perspective

In near future, the combination of big data sciences coupled with artificial intelligence and cloud computing can boon and unearth the untapped roles which can be new horizon in the cloud computing domains. As the world has already witnessed emerging roles of artificial intelligence which has been reported to be the next revolution [12].

## 7. Conclusion

Therefore, you will need to have a clear understanding of what is available to you and what is not available in the current market place. There are many more key elements of a multi cloud strategy. This article only briefly covered some of the most important ones.

## References

1. Namiote. D, Snippes. N. (2014). On Micro Service Architecture. International Journal of Open Information, 1-1.
2. Sekar. V, Ratnaswamy. N. (2012). Design And Implementation Of Cloud Architecture. USENIX 2012, 1-1.
3. Balalaie. A, Jamshidee P. (2016). Migration To Cloud Native Architecture. IEEE Software 2016, 1-1.
4. Liu. H, Wee. S. (2009). Web Server Farm In The Cloud. IEEE International Conference On Cloud Computing, 1-1.
5. Uppal. H, Brandon. D. (2010). Open Flow Based Load Balancing In The Cloud. Networking Project Report, 1-1.
6. Gigliotte S.S, Boole. S. (2002). Methods Of Load Balancing In The Cloud Architecture . Google Patents, 1-1.
7. Hou. L, Zhou. S. (2016). Internet Of Things-Cloud Architecture. IEEE 2016, 1-1.
8. Sorenson. J.C. (2016). Distributed Load Balancer In Cloud Architecture. Google Patents 2016, 1
9. <https://enterpriseproject.com/article/2017/7/hybrid-cloud-security-8-key-considerations>
10. <https://www.networkcomputing.com/cloud-infrastructure/complex-cloud-architecture-types>
11. <https://www.ibm.com/cloud/learn/load-balancing>
12. R.R. Nadikattu. 2016 THE EMERGING ROLE OF ARTIFICIAL INTELLIGENCE IN MODERN SOCIETY. International Journal of Creative Research Thoughts. 4, 4,906-911.