A Challenge Over Migrating Data in Cloud Computing

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Abstract

Today Cloud Computing is a need for the development of any organization. If you have strong cloud supports you can achieve grate position in business and satisfied the need of your customers. Use of cloud Computing is also give proper financial budged to your business as it will provide you best solution in lover cost. But for that you need to move your database and application over the cloud storage, so that you can make your own private cloud and provide access to your users. However there are some challenges while migrating database to cloud. While migrating in cloud there is various factors need to be considered like, service provider, migration strategy, cost, technical support, migration tools etc. we can achieve perfect migration if we plan it properly. Before migrating into cloud you must need to kept in mind Do's and Don'ts of cloud migration. This paper is all about what can do and what not while migrating over the cloud. If you know what to do and what not while migrating your Application or Database over cloud there is a less chances to have data loss or Application Failure while Migrating over Cloud. This paper also help full for the new users to migrate application or data with lover cost if they follow proper instruction and guidelines provided by this paper.

KEYWORDS-   Cloud provider, Migration, Community Forms, Rollback, and Downtime.

I.   Introduction

If we use cloud Technology in right way then cloud computing and storage models can be provide effective solution to our migration problems. In this latest trend of technology you need to learn how to survive and live in this new reality sooner rather than later. Business adopts cloud computing because of its speed in lover cost. It also provide Infrastructural overheads and provide quick access to latest technology for make cloud better and attractive. But the Question remain the same, How to do this? What to do? What not to do? Any Cloud mover first find answer to all this questions and then go for migration over cloud computing. It can save your time, cost and provide better solution for you. So, here is some useful information for cloud movers before migrating.

➢ Following are the some Challenges while Migrating over Cloud Computing.

1. Do Find out your actual need like What to migrate and How to Migrate

While migrating over clouds computing first find out what you need to migrate. Is it a Application or Data. After that plan your migration. For example if you want to migrate Application into cloud you need to consider in which cloud computing model you need to migrate your application. There is various cloud computing models like. Private, Public and Community Forms, as well as Hybrid models that is combination of subset of these

above forms, or all of them. As per your migration requirement select any of them and then move further. "It is great to start a new business without costly IT infrastructure and staff expenses. Cloud saves you a lot of money there". Once you are done with that, take the next step; figure out what to move to the cloud. It can be your data, an application(s); a portion of your IT infrastructure or the entire spectrum of IT operations (CloudTweaks, jan 2015).

2. Do take your finance into Accounts

Cost is a Backbone for business and can play vital role in Cloud migration too. If you plan for migration you must Carefully Compute your expenses against other available resource. It will help you to figure out which solution best suits to your business as well as your pocket too. if you choose any random resource it will provide you financial damage in future so, be careful an always consider cost as a mature issue while migrating over cloud computing

3. Do Learn about cloud Computing

If you want to migrate anything over cloud it's better to learn some basic about cloud computing. This includes industry trends and available services, said Maluf. "All clouds are not created equal, and there are important distinctions, consumer-oriented versus enterprise-grade," he said. "Research cloud service providers and their capabilities and services" (McNickle, June 12, 2012). knowledge about the cloud computing helps you to choose better sloution to your business. You may select proper model for your business and save your cost as well as time.

4. Do proper planning and then build your strategy

Best plan always give best results. If you plan and build your proper strategy you will defiantly achieve best result. It's good to build an integrated cloud strategy and associate roadmap. Maluf Said "Focus on incremental value by emphasizing infrastructure delivery and management simplification," (McNickle, June 12, 2012).

5. Do Train your of staff before migration

Training of staff plays an important role to achieve best result in any organization. If you have train staff then you can make better use of any available application. Before migrating in cloud you and any member from your team need trained properly. That person how going to handle app the application must have through knowledge about how the cloud computing works. But if not then it's time to train them, take up training sessions with service provider. Because the skill that required to migrate are quite different from the skill used to keep running cloud base system.

6. Do risk Analysis before migration

It's better to Understanding Risk and analysis of that before migrating over cloud. It is important because if you are planning for move your data in public cloud then there is risk of data loss or security. As public cloud is shared by many subscribers there is privacy issue occurred and in public cloud provider is offered limited services there is

no customization available that suits to your business and fulfill your needs. Maluf said don't neglect application performance management analysis, "otherwise, pre- and post-cloud migration user experience will be hard to quantify, and SLAs will be tough to agree upon and effectively manage" (McNickle, June 12, 2012). So to reduce risk its better confirm the provider how suits your need or find one who can do that for you. Make sure that your important applications work smoothly in new cloud environment. If not make suitable changes and run it. Do all this before migration so that you can save time and cost too!

7. Do have your Rollback plan ready

   Things can go wrong at any time and failures is always a possibility while migrating over cloud computing. So it's important to have plan B while migrating because if plan 'A' fails then you must have escape plan 'B' ready while migrating. Your cloud partner should be completely transparent and agreeable on this aspect. You must ask for confirmation in written from the provider that in the event of any disaster or anything wrong happened or if you want to quit cloud, in all this case you have total control over your data. You should be able to access and retrieve your data in usable form. Even while migrating if anything goes wrong, you should able to safely undo the process and recover all the data.

8. Don't Follow crowd

   Always remember if you want success don't follow people blindly make your own decision. If you want best solution for your migration over cloud just follow your own requirements. Although while migrating many public and private cloud may feel like right choice for putting your application and data, but you need to find your own requirements. As you know it's make proper plan and proof of concept testing before selecting path for the cloud.

9. Don't Try to build your own cloud if not needed

   There is no use of build your own cloud if still need to pay for online support by provider or data centers. If you want to move your data then instead of building your own cloud it's better to lean from any available company. You just need to pay for the service and all maintenance and other works will do by them. Paying for your clouds is not mean you don't have your own private cloud you have it but probably you don't want to build it by yourself. Making your own cloud is not bad move the bad move is to do it without careful consideration of your needs.

  10. Don't risk unnecessary downtime

   Want to migrate your data in cloud think for data transfer capabilities your chosen. Make a sure what data transfer capabilities your cloud service provider affords you while migrating toward cloud. Each cloud have its own standards for transferring of data where it has Public, Private or hosted services. There is no transparency while data migration over different platform and it must be performing as quickly as possible. So

it's better to think for data transfer capabilities before migration to save unnecessary downtime.

11. Don't Delay

Don't waste your time for thinking so much, now its time to start thinking about cloud migration. If you wait more you need to pay more, so make your cloud strategy as early as possible delay increases your cost.

12. Don't Prefer any random cloud services

While migrating in cloud don't go for any new or random cloud service provider. Managed cloud service might cost more, but it gives entire IT infrastructure and Management lode on their shoulders, So that you can concentrate on your core business. If your provider is new it will not follow run book or written set procedures for the exceptional operation of the system given by Administrator or operator. Ti will tell you how you can work with heavy load and handle stressful situation like migration.

Conclusion

Its good practice if you Analysis and find your requirements before migrating over cloud, examine available cloud option and test them with chosen provider before the actual migration performs. Don't try to build your own cloud instead of go for private cloud service provider its will gives you better scalability and reduce your lode. Always check for better cloud model for your database don't follow crowd. It's not proper migration but proper training to your staff also essential for achieving grate result. Don't go for random providers always take service from experience and managed service provider, it cost you more but provide better solution to requirements. Also think for data transfer capabilities before migration to save unnecessary downtime. Most important don't waste your time just go for it! Just follow all the above instructions properly, so you get right path from day one.

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