

Review on Data Base as a Cloud

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ABSTRACT: *Cloud computing is a service that allow and use computing as product wide service. It has set new parameters the IT sector and getting it recognition every day by expanding itself. The paradigm of computing has received a significant excitement and attends on the technological sphere. Cloud computing shares are based in different countries it data and different resources are always based on different devices to that are connected to each other through internet connection. If we go by the term, then a cloud data base management system(DBMS) is a system of database management that operates through cloud computing. Cloud computing provides a secure platform so it is expected that in future DBMS acting through cloud computing can be increased there is an internet in outsourcing DBMS tasks to third party results. Benefits of DBMS using cloud computing are discussed in this paper their limitation opportunities and other issues are reviewed here.*

KEYWORDS: *Cloud, Cloud Platform, Computer Workload, Data Base, Data Management*

INTRODUCTION

In recent times, technological progress has reached a high point, especially in cloud services development and studies. Technology and principles, however, are rapidly changing and there is an increasing number of open issues. Nowadays, one of the most needed features of cloud services is DBMS outsourcing[1]. Technological advances in the transfer of data through the network have largely influenced the cost of data transmission. In addition, DBMS progress has been made in two dimensions of comparison: data management and transmission. Data management is more expensive than data transfer based on the related research[2].

Moreover, the interest in outsourcing DBMS to third parties who can provide these tasks for many is growing rapidly scaling savings cost lower. A modern outsourcing platform has few, but most advantages, the important advantage is the cost savings to operate DBMS on its own. Furthermore, a DBMS cloud is just a cloud storage provider available from everywhere and available[3]. The key way that cloud DBMS interacts is through the Internet, whereby multiple devices share information and there are expected to be an increase in the number of those devices. Many organizations are already providing DBMS as a cloud service, such as Microsoft Azure, Google and others. Amazon EC2, Go Grid, Data Guarantee, Mongo Lab, and many more. These companies have two common cloud services[4].

Models for deployment: We should either use a database independent of a virtual machine or buy a cloud service database retained by cloud organizations listed above. There are also cloud providers more suited for end-users, since in the 'pay' model and in, you provide services in contrast with other services, this way services are cheaper. We define the implementation models in this article, cloud DBMS architectures and standard features. We also research why DBMS should be used as a cloud service. A cloud service. Finally, we are explaining a DBMS cloud architecture and providing some of their benefits.

DISCUSSION

Initial State:

As with other technology fields needing adjustment, DBMS must be enhanced in a particular environment. In this section the need to use DBMS as a cloud provider is addressed. We're still worried about corporate business for big data, with tear's or gigas[5].

DBMS in Cloud Platform:

The purpose of our paper is to illustrate the idea of cloud DBMS to the readers and encourage them to move towards service of the cloud. In order to do so, we must first concentrate on the core aspects of cloud computing. There are few, but the most important are: parallelization of device workload, untrusted host of data storage, duplication of data over long distances are also the most worried cloud concerns, these three characteristics platform[6].

Parallelization of Computer Workload:

Here we will describe the idea to the readers: machine workload parallelization, how parallel computer operations and its privileges. Nowadays, electronic technology has many challenges. The solution has been sought by concurrent processing applications. In parallel computation, the problem is solved by task Organizing. Moreover, the major parallel computing tasks are limited, but the key tasks are to separate issues in a number of parallel tasks by splitting these problems into many parallel tasks results are more qualitative to outline[7]. The programming is carried out with the implementation of a certain algorithm, that varies from one to the next. Under this DBMS, performance has been enhanced by paralleling the Various operations like: queries execution, constructing indexes and data loading. Improving DBMS cloud processes is accomplished by the use of multiple, parallel CPUs and multiple discs. Centralized databases, even less computation, are inadequate to accommodate high storage capacity. Furthermore. Furthermore parallel databases are broken down into two groups: architecture of the multiprocessors, and architecture hybrid. Multifunctional CPU Working on all three architectures, Architecture operates on shared memory, common disc architecture and architecture shared none.

Shared Memory Architecture:

Shared memory is an architecture in the cloud platform which enables multiple CPUs to only access its purpose to communicate or remove duplicate copies between them. Many services depend on this and can run on a single or several different processors. We'll present a shared memories sketch of the next architecture[8].

Shared Disk Architecture:

Shared disc architecture is distinct from shared memory, as all processors only share discs that in the network interact. Each processor has access to its managed memory in the shared disc architecture of the CPU itself. There are few benefits of shared disc architecture, but the most critical thing is the low. Price, it offers load balance and promotes centralization migration. We'll show you a drawing of the next architecture of the shared disc[9].

Shared Nothing Architecture:

In this section we will define the architecture shared by the readers. None in general SN is known for architecture. "SN" means that each provider has a database and it is SOA terms. Just the service is used and no memory or discs are exchanged. Just if the hardware is analyzed perspective it's a local disc and memory computer.

Untrusted Host:

The key safety reasons for cloud computing are explained for readers in this section. Computers for cloud security is not a simple security programme, it consolidates few securities (security of service), like machine security of machine, network security and security of documents. Furthermore, cloud stability is the main task protection of and safeguarding of records. Organizations use Cloud for multiple challenges, for example service software (SaaS), service product (PaaS) and a secure cloud service are few in number problems, however, are two more important, namely cloud protection concerns and security problems users supplied. Customers, service suppliers and users are half accountable[10]. First manufacturers should provide a stable infrastructure and secure the application while maintaining a large user base to improve your submission,

usernames and password. The protection of the data is another troubling problem for the consumers, since it can happen, but this should not be saved on the same computer, one user data should be stored with another user, a troubling dilemma for us, as cloud providers provide us with data protection through isolation and application separation of conceptual storage. The monitoring of government data is another security problem. The dilemma is also concerning because in different continents there is not the same rule. Moreover, in the USA this arrangement stipulates that cloud databases should be available between cloud providers and the government and they should have total data access by the government.

Identity Management:

Management of identity is a protection and privacy problem while each organization should monitor details and resources by using the control structure of the identity. Cloud services combine the protection and privacy identity protection mechanism of customers into their infrastructure leveraging highly effective authentication technologies Single Sign- on SSO or SSO technologies.

Physical Security:

Cloud services can have physical protection that affects the company's physical issues including cables. It is worth it, since unlicensed entry, burglary or fires are likely.

Application Security:

Cloud services define, build and execute software in a protected manner. Not only can you block unwanted entry, but any threats that appear to the application may be detected. This also allows users to develop their trust on cloud services.

Privacy:

The protection of the data such as credit card numbers or some other significant problem in cloud computing relevant information. important information. All this essential information is protected since it is encrypted with special information. Key and access is only open to registered users. In addition, the digital identity that cloud computing will assist users are more safeguarding their records.

Replication of data across long distances:

The key points of cloud database vendors are the accessibility and longevity of the data, as data loss will harm the credibility of the business. The data can be made usable and robust by replicating the covers. Replication of data without customer request and consent shall be immediately repeated under cover. The reproduction of the data encourages people to have access to their data without noticing which server they have and who is not on. greater company offering cloud-specific databases, including Google, Azure, Amazon etc.

CONCLUSION

In this paper the discussion is about database management solutions provided as cloud infrastructure offerings. We've finished the latest accomplishments and three main features of cloud databases allow users to explain a notion that suggests the readers can switch out to the cloud from standard DBMS to cloud DBMS. At the end it is been described about the cloud DBMS architecture and the general architecture.

It is being assumed that the only way to achieve this is to migrate through the cloud. Cheaper than most programmes, and the job approach is a long time preparation. Cloud databases are also available, services will have secured environments because our data is secured by the cloud provider and every time we need them, it is easily recoverable. Finally, the safest option for an organization is to switch to the cloud since it reduces

storage and network investment resources which are not optimally used. The customer pay model used by cloud services enables these tools to be used more effectively by user sharing and it is also cheaper when consumers only pay for the services that they currently use.

REFERENCES

- [1] N. J. King and V. T. Raja, "Protecting the privacy and security of sensitive customer data in the cloud," *Comput. Law Secur. Rev.*, 2012, doi: 10.1016/j.clsr.2012.03.003.
- [2] Y. Sun, J. Zhang, Y. Xiong, and G. Zhu, "Data Security and Privacy in Cloud Computing," *International Journal of Distributed Sensor Networks*. 2014, doi: 10.1155/2014/190903.
- [3] L. Griebel *et al.*, "A scoping review of cloud computing in healthcare," *BMC Medical Informatics and Decision Making*. 2015, doi: 10.1186/s12911-015-0145-7.
- [4] J. Lansing and A. Sunyaev, "Trust in cloud computing: Conceptual typology and trust-building antecedents," *Data Base Adv. Inf. Syst.*, 2016, doi: 10.1145/2963175.2963179.
- [5] P. Jamshidi, A. Ahmad, and C. Pahl, "Cloud Migration Research: A Systematic Review," *IEEE Trans. Cloud Comput.*, 2013, doi: 10.1109/TCC.2013.10.
- [6] A. Bahga and V. K. Madiseti, "Analyzing massive machine maintenance data in a computing cloud," *IEEE Trans. Parallel Distrib. Syst.*, 2012, doi: 10.1109/TPDS.2011.306.
- [7] O. Harfoushi, B. Alfawwaz, N. A. Ghatasheh, R. Obiedat, M. M. Abu-Faraj, and H. Faris, "Data Security Issues and Challenges in Cloud Computing: A Conceptual Analysis and Review," *Commun. Netw.*, 2014, doi: 10.4236/cn.2014.61003.
- [8] D. Collector and F. G. Module, "Qualitative Research Methods Overview," *Qual. Res. Methods A Data Collect. F. Guid.*, 2011, doi: 10.2307/3172595.
- [9] I. A. T. Hashem, I. Yaqoob, N. B. Anuar, S. Mokhtar, A. Gani, and S. Ullah Khan, "The rise of 'big data' on cloud computing: Review and open research issues," *Information Systems*. 2015, doi: 10.1016/j.is.2014.07.006.
- [10] H. F. Atlam, R. J. Walters, and G. B. Wills, "Fog computing and the internet of things: A review," *Big Data and Cognitive Computing*. 2018, doi: 10.3390/bdcc2020010.