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Design of Uniform Infrastructure and Unlimited Scalability Solutions for Organization Using SIaaS Framework

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ABSTRACT:

Better meet demands using latest version of hardware migration framework. Migration framework ensures to provide complete control and enhanced performance solution. It provides some more benefits like increased productivity and minimized data risks solutions. Previous IaaS solutions are best and scalable but very complex and cost is high. Here number of Virtual Machines requirement is more.

To reduce complexity and cost now in this paper we design logical volume VMs using Free Style Search Technique. Using logical VMs any demand requirement also gets solution efficiently with sufficient storage infrastructure as a service (SIaaS) environment. Sufficient infrastructure solution provides good unlimited scalability results. Compared to previous approaches, present approaches gives better cost saving and complexity solutions.

KEYWORDS: IaaS, SIaaS, logical volume VMs, scalability, uniform infrastructure, scaling, capacity, availability.

I.INTRODUCTION

Business organizations need Infrastructure as a service (IaaS), Using IaaS we can provide better services to number of customers. Previously one pool of VMs did not gave any sufficient scalability and performance results. Whereas new multiple pools of VMs gives some other best solutions. These are very complex and low performance solutions.

In previous Infrastructure as a service solutions are not efficient. Now we design logical volume of Storage infrastructure as a service(SIaaS). It gives efficient scalable and performance solutions and on demand based infrastructure as a service solution. It is possible to add new locations and also possible to provide solution for new locations users. It is most helpful for all organizations and IT management environment.

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In-memory database combined transactional data processing, analytical data processing, and application logic processing functionality in memory. In-memory database solution provides with high availability, transactional isolation and recovery.

II.RELATED WORK

Increasing Application performance depends on dynamic resources provided by virtual environment. Here we are designing virtual machine environment using control theory. Control theory has fine grained access control techniques. Control theory designs proactive and reactive features. Prediction models are designed using proactive and reactive features. This same idea can be extended to cloud efficiently. These models do not handle capacity sufficiently which is available as VMs. These are not much efficient solutions.

In some other categories VMs are designed for providing cost efficiency results. In VMs different kinds of strategies are designed, those are resource allocation and other resources strategies. These kinds of strategies are most helpful to get maximized profit within minimized SLA(service level agreement) time.

The above approaches are not efficient for enhancing application performance. Now in cloud environment we can add auto scaling features. Auto scaling means addition or deletion of instances. Many number of third party management services are designed with different auto scaling features. We can get good performance using auto-scaling features with new third party management services.

Some other IaaS models are designed based on cost aware auto scaling VMs. Pricing policies are designed in a way that we will pay the amount only for the resources we have used. These kind of services are provided by the leased VMs. Once load variation is available automatically VMs resources selection also changes.

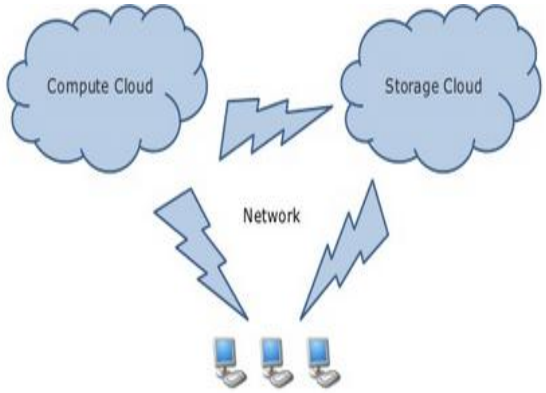

Fig1: example for Infrastructure as a service

Workload prediction is the major solution for providing cost efficient solution. Here we can create a Collection workload prediction solution and then we design average VM scaling procedure. We can use average VM scaling procedure for pre

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scaling solution. The above all operations are helpful for reducing the operational cost.

Now we are considering various aspects in cloud computing environment for automated provisioning. Service can perform like allocate and de-allocate resources. This kind of service providers are handled to provide service based on demand. It can provide the services with minimized operational cost. Finally all users gets the QoS solution efficiently. It provides best performance solution using various techniques. Those techniques are control theory and machine learning techniques.

Resources can be utilized to maximum extent and also efficiently. Next we can recognize under utilized services and save the resources. But hear the major problem is all requests are not executed within the deadline. Some delay problems occurs here in our implementation. So we design new scheduling using auto scaling procedures and complete all tasks within deadline time. In market different instance type VMs are available. Using different instance type VMS it is possible to design cost efficient VMs framework solution. In Cost efficient solution we can display with elastic strategies and auto scaling procedure. All users gets the services with in less amount of time.

Finally new techniques are introduced here. One pool of VMs and three pools of VMs are also not providing any best efficient solutions. These are complex scheduling solution environment procedure. Performance and scalable solution are not beneficial in our implementation.

In this paper we design new scalable infrastructure as a service scheduler. It gives best application performance solution.

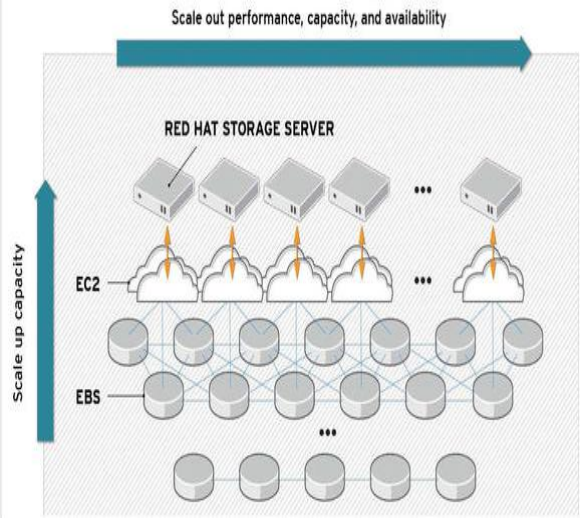

Fig2: scale up capacity, performance and availability

III.PROBLEM STATEMENT

Previously several methods are proposed here which addresses many number of auto scaling issues. No mechanism fulfills all parameters which is available for previous methods efficiently. Now we design in-memory VMs. In-memory VMs provides flexible solution with dynamic configuration settings. Dynamic configuration settings do not add new VMs. In available VMs

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capacity increases itself based on the requirement. These kinds of VMs provide best scalable and performance solution compare to all previous approaches.

IV.PROPOSED METHODOLOGY

Here we are introducing innovative Storage infrastructure as a service solution for increasing application performance and scalability. New innovative data storage techniques effectively manages any kind of large business applications. Hardware based systems requires infrastructure in every location, whenever we have a sufficient infrastructure then we can distribute data efficiently. We will get faster solutions compare to all previous approaches.

Storage capacity solution is the new solution for addition of new offices. This kind of solution can be called as a hardware migration. This is the latest version hardware migration solution. Another name for New hardware migration is in-memory database solution creation in number of VMs.

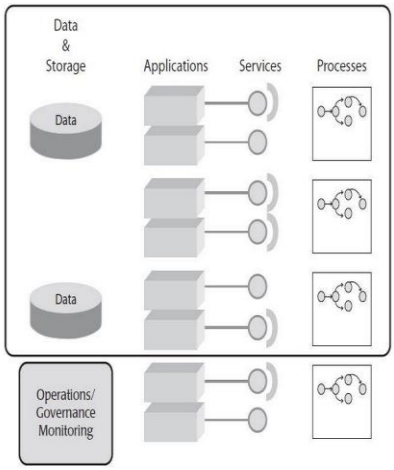

Fig3: Latest Version of Hardware Migration System

Object-based storage will dominate the data storage scene, facilitating storage of large-scale enterprise data with maximum flexibility and greater efficiency. Scale-out Storage architectures will be deployed in huge numbers to keep pace with the massive growth of unstructured mobile and social data generated in huge volumes. The new version of hardware will witness an increased adoption of clustered storage and in-memory databases: hybrid flashes storage systems and Quantum storage and Holographic storage.

4.1 CONSOLIDATED STORAGE:

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SIaaS consolidates all services into single service and reduces resources utilization and hardware complexity issues. It provides different kinds of solutions. These solutions are discussed below here

1. Uniform infrastructure
2. Unlimited scalability

Uniform Infrastructure:

SIaaS modifies traditional hardware system environment and creates new infrastructure suite for handling any large amount of tasks. Consider demand generate re-organized or reformulation solution infrastructure. All number of users gets the results with good performance. These new hardware solutions are needed for IT management and different organizations.

Unlimited Scalability:

SIaaS designs logical volume of database related VM, and collects users requests and automatically VMs capacity increases logically. Logical VMs are design enhanced capacity information with different kinds of controllers. It does provide more efficient, performance and scalability solution.

The above features are helpful for adding new offices requests. After adding new offices requests it provides good solution.

V.EXPERIMENTAL RESULTS AND DISCUSSION

We observe performance measure comparison between different models. Here we concentrate on different parameters. Those parameters are accuracy, performance and scalability.

1	9.0332e-07	9.2321e-07	9.8899e-06	1.1221e-03
5	4.1622e-05	4.3364e-05	4.2334e-02	8.0500e-02
10	2.3731e-04	2.4225e-04	2.3496e-01	2.6587e-01
15	6.3539e-04	6.4377e-04	3.9860e-01	4.1493e-01
20	1.2526e-03	1.2655e-03	5.1069e-01	5.1969e-01
25	2.0990e-03	2.1179e-03	5.8915e-01	5.9449e-01
30	3.1826e-03	3.2091e-01	6.4648e-01	6.4985e-01
35	4.5106e-03	4.5462e-03	6.8999e-01	6.9223e-01

Fig4: performance analysis results

VI.CONCLUSION AND FUTURE WORK

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Analytical models are powerful for the construction of new service models. Analytical models recognize the limitations and overcome into new service models. In this paper new logical volume capacity planning VMs are designed. It supports all organizations and IT management applications. All organizations owners will be benefited with new logical capacity VMs. Using new logical volume capacity VMs we achieve best scalability and performance results.

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