

Retrieval of Universal Data From Cloud Using Web API2

Ritika chugh, Nishu bansal
Indo Global College of Engg, Mohali, Abhipur

Abstract - “Cloud” computing builds on decades of research in virtualization, distributed computing, utility computing and more recently networking, web and software services. It implies a service-oriented architecture, reduced information technology overhead for the end-user, great flexibility, reduced total cost of ownership, on demand services and many other things. Our experience with VCL technology is excellent and we are working on additional functionalities and features that will make it even more suitable for cloud framework construction. However VCL has set a lower bound on the end-to-end connectivity throughput, roughly at the level of DSL and cable modem speeds. At any point in time users work must be secure and protected from data losses and unauthorized access. Our research work is based on Azure in which a metro app is to be implemented having feature of platform independence, supporting web as well as desktop application and work on hybrid cloud. A web service that provides resizable compute capacity in the cloud

Keywords - WEB API2, Azure Configuration, Cloud Computing, Balance Loading

I. INTRODUCTION

Cloud computing, often referred to as simply “the cloud,” is the delivery of on-demand computing resources everything from applications to data centers over the Internet on a pay-for-use basis. **Elastic resources** Scale up or down quickly and easily to meet demand **Metered service** so you only pay for what you use **Self service** All the IT resources you need with self-service access “Cloud” computing – a relatively recent term, builds on decades of research in virtualization, distributed computing utility computing and more recently networking, web and software services. It implies a service oriented architecture, reduced information technology overhead for the end-user, great flexibility, reduced total cost of ownership, on-demand services and many other things. “Cloud computing” is the next natural step in the evolution of on-demand information technology services and products. To a large extent, cloud computing will be based on virtualized resources. An increasing number of web applications are now hosted in cloud infrastructure such as Amazon web services. Attributes of cloud computing **Resource pooling:** The cloud enables your employees to enter and use data within the business management software hosted in the cloud at the same time, from any location, and at any time. This is an attractive feature for multiple business offices and field service or sales teams that are usually outside the office. **Rapid elasticity:** If anything, the cloud is flexible and scalable to suit your immediate business needs. You can quickly and easily add or remove users, software features, and other resources.

II. LITERATURE REVIEW

Yen Chun Hsu[1] propose the Micro App architecture that help address the difficulty in dealing with the non-uniformity. Micro App splits a web application into multiple micro applications. Each micro application encapsulates a port of the code and data with the same level of security and integrity requirement. The micro applications will then be deployed to corresponding infrastructures that satisfy the respective requirements. Micro App provides an RPC mechanism to allow control flows across micro applications. The architecture can be transparently applied to existing web applications and allows an application to effectively adapt to the cloud environment.

Li, X. Yang, et al. [3] Cloud Computing measures the elastic computing, persistent storage, and networking services offered metrics that directly reflect their impact on the performance of customer applications. **Williams et. al** [4]. They discuss some current solutions. They describe upcoming research work in cloud as regard data security and privacy protection issues **Heffner R. et al.** [11] talked about the need to automate API key management in the past with the number of APIs we are using, to reach the level of security we will need, the lower level of keys will need a global refresh and management process. **Nikaien N. et al.** [5] API service composition is about taking the basic building blocks of any web API, the URL, path, and VERBS (ability to get, add, update, and delete), and put them into as many different configurations as you think makes sense.. API service composition is all about taking your APIs. **Envas D. et al.** [12] Cloud computing is based on several other computing research areas such as SOA, virtualization, utility computing and grid computing. Cloud computing is a type of computing that relies on sharing computing resources like memory, processors, database and applications. **Deelman et al.** [14] evaluate the cost of Amazon EC2 by porting a real-life astronomy application to the cloud and execute it using different resource provisioning plans. They conclude that the cloud is a cost-effective option since the scientific application provider does not need to buy an entire cluster for a few runs of the application. Many clusters are underused as the hardware quickly becomes obsolete. The cloud solves this problem as it is a responsibility of the cloud provider to keep upgrading the hardware and provide an up-to-date service to the users. In our research, we compare Azure and EC2 and evaluate the relation between cost and performance of both clouds.

III. PROBLEM FORMULATION

In our research work we face the problem in already built app :-

The main problem was not support for hybrid cloud, the app were support only on public and private cloud, and also it doesn't use the rest api, and the app was platform dependent.

So by keeping these problems in mind we make an app which is generally called as metro app and includes a feature of platform independent, the app can be access from the mobile as well as the web interfaces. Replication with Saas services.

IV. CONCLUSION

Our research work is based on Azure in which a metro app is to be implemented having feature of platform independence, supporting web as well as desktop application and work on hybrid cloud using WEB API2. we evaluated the Windows Azure platform as a platform to run general Instance applications. We showed how to port applications written for the UNIX programming model to Azure and compared their performance to a real machine and an Amazon EC2 instance with similar characteristics. We measured the execution time and examined the efficiency of the cloud solutions in terms of performance and cost with a new metric.

When we compared the performance of general instance application with real machine and azure .then **performance is almost double** on azure than real machine .

Cost factor : cost on azure is **high** than real machine.

Execution time: application execute **fast** on azure server than real machine.

Efficiency of azure server is **greater** than real machines it is so because azure server not get hanged and it always store a duplicate copy of data on its local primary server.

V. ACKNOWLEDGEMENT

Working on this thesis of "Retrieval of universal data from cloud using web API2" provided a unique experience and analysis, I feel great pleasure and privilege in working over this research. I am deeply indebted to "Indo Global Colleges" for the invaluable guidance, support and motivation for the many other aids without which it would have been impossible to complete this project. I have no words to express my deep sense of gratitude for (Nishu Bansal) for her lightening guidance, directive encouragement, suggestions and constructive criticism for always listening to our problems and helping us out with their full cooperation.

VI. REFERENCES

- [1] Yen Chun Hsu, "Architecting Web Application for non-uniform trustworthiness in cloud computing environment" IEEE 2014, DOI 10.1109.
- [2] D. Kondo, B. Javadi, P. Malecot, F. Cappello, and D. Anderson, "Cost-benefit analysis of cloud computing versus desktop grids," in *Parallel Distributed Processing*, 2009. IPDPS 2009. IEEE International Symposium on, may 2009, pp. 1–12.
- [3] A. Li, X. Yang, S. Kandula, and M. Zhang, "Cloudcmp: comparing public cloud providers," in *Proceedings of the 10th annual conference on Internet measurement*. ACM, 2010, pp. 1–14.
- [4] Williams A. "Cloud Computing: An Analysis of Its Challenges & Security Issues", *International Journal of Computer Science and Network (IJCSN)*, vol.1, issue 5, October 2012 www.ijcsn.org ISSN 2277-5420.
- [5] Nikaian N. "checking Iot devices on non http protocols", *VSRD-IJCSIT*, vol. 2 (4), 2012, 316-321.
- [6] R. Buyya, C. S. Yeo, and S. Venugopal, "Market-oriented cloud computing: Vision, hype, and reality for delivering it services as computing utilities", in *Proceeding of 10th IEEE Int. Conf. High Performance Computing and Communications*, 2008, pp. 5–13.
- [7] Rejoice Paul, Mansi Talreja, Aman Sahu and K. John Singh, "Security Issues In Cloud Computing", *International Journal on Computer Science and Engineering*, vol.4, no.11, Nov 2012, ISSN : 0975-3397.
- [8] Sai Krishna Parsha and Mohd. Khaja Pasha, "Enhancing Data Access Security in cloud computing using Hierarchical Identity based Encryption (HIBE)", *International Journal of Scientific & Engineering Research*, vol.3, issue 5, May 2012.
- [9] Sara Qaisar and Kausar Fiaz Khawaja", *Cloud Computing : network/Security Threats And Countermeasures*", *ijcrb*, Jan 2012 vol.3, no.9.
- [10] Tamleek Ali , Mohammad Nauman , Fazl-e-Hadi ,and Fahad bin Muhaya; "On Usage Control of Multimedia Content in and through Cloud Computing Paradigm".
- [11] Heffiner R. "Implementing Digital Signature with RSA Encryption Algorithm to Enhance the Data Security of Cloud in Cloud Computing", in *Proceeding of IEEE 1st International Conference on Parallel, Distributed and Grid Computing*, 2010.

[12] Envas D., “API management solutions with IoT protocols”, *International Journal of Emerging Trends & Technology in Computer Science*, vol.2, issue 6, November-December 2013 ISSN 2278-6856.

[13] Volker Fusenig and Ayush Sharma, “Security Architecture for Cloud Networking”, in *Proceeding of IEEE International Conference on Computing, Networking and Communications, Cloud Computing and Networking Symposium*, 2012.

[14] E. Deelman, G. Singh, M. Livny, B. Berriman, and J. Good, “The cost of doing science on the cloud: The montage example,” in *High Performance Computing, Networking, Storage and Analysis*, 2008. SC 2008. International Conference for, nov. 2008, pp. 1–12.

