

A Study on Services Provided by Various Service Providers of Cloud Computing

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Abstract

In an outstanding regression to the 1970s, many companies are finding that buying in computer services makes more business intelligence than do-it-yourself. This new trend is called cloud computing. Cloud computing offers different types of services commonly referred to as Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) have incredible uses for IT companies. It also provides software and hardware that is accessible in the distributed location which can assist an individual or a business through any internet connection. This paper is presenting a relative study on various service providers of cloud computing which is mounting very fast in the age of internet.

The study of this paper will assist to a better evaluation of various service providers of the cloud computing. It is focused on comparisons between various parameters such as services and tools provided by providers, platform supported by, languages supported by, information security, scalability, what is the maximum limit of data we can set on cloud computing. It is also discussed about the types of clouds and services provided by various cloud service providers and advantages and disadvantages of using cloud computing.

Keywords : Cloud computing, SaaS, PaaS, IaaS, service providers, Internet

1. INTRODUCTION

It facilitates that instead of all the computer hardware and software you're using sitting on your desktop, or somewhere inside company's network, it's provided as a service by another company and accessed over the Internet in a totally flawless way. Cloud computing can be described as a computing environment where computing desires by one party can be outsourced to another party to use the computing power or resources like database or emails, including data storage space, networks, power, and specialized corporate and user applications they can access them through internet.



Fig-1 Basic model of Cloud Computing

Cloud computing is a moderntrending in IT that moves computing and data away from desktop and portable PCs into large data centers. Just where the hardware and software is placed and how it all works doesn't issue to the user—it's just anywhere up in the "cloud" that the Internet represents.

2. SERVICE MODELS

The different services, being provided in cloud computing, are classified into three categories.

- ✓ Software as a Service (SaaS)
- ✓ Platform as a Service (PaaS)
- ✓ Infrastructure as a Service (IaaS)

Infrastructure as a Service (IaaS) is a form of cloud computing that provides virtualized computing resources over the Internet. An IaaS provider provides policy-based services and is responsible for housing, operating and maintaining the equipment it provides for a client. Clients usually pay on a per-use or utility computing basis.

SaaS, or Software-as-a-Service, is an on-demand, cloud-based delivery model for software applications. A service provider hosts the application at a remote location and the user accesses it over the Internet using a web browser. The best ever example of Software as a service is a software distribution model in which a third-party provider hosts applications and makes them accessible to customers over the Internet is GoogleApp that includes email, file sharing, editing, calendar and many more.

Platform as a Service (PaaS) means you develop applications using Web-based tools so they run on systems software and hardware provided by another company. So, for example, you might develop your own ecommerce website but have the whole thing, including the shopping cart, checkout, and payment mechanism running on a merchant's server. App Cloud (from salesforce.com) and the Google App Engine are examples of PaaS [8].

SaaS is used by business user to perform the task like email, office automation, CRM etc. PaaS is used by developer to create or deploy applications or services for the users like service application test, development, integration and deployment. IaaS is used by System manager to create platform for service application test, development, integration and deployment for virtual machine, operating system, message queue, network storage, CPU, memory, backup service [1].

3. SERVICE PROVIDERS OF CLOUD COMPUTING

There are many cloud computing providers available in industry. Few companies are leading in this is listed below.

- Amazon Elastic Compute Cloud (EC2)
- Microsoft Azure Services Platform
- Google App Engine
- Salesforce.com
- Akamai EdgePlatform
- IBM Computing on Demand (CoD)
- Rackspace Cloud
- Terremark
- NetSuite
- And many more.....[9]

Criteria	Amazon AWS	Windows Azure	Google App Engine
Service model	PaaS IaaS	PaaS IaaS	PaaS SaaS
Platforms supported	<ul style="list-style-type: none"> • Red Hat Enterprise Linux • Windows Server 2003/2008 • Oracle Enterprise Linux • Microsoft SQL Server Standard 2005 • Fedora Gentoo Linux 	Operating Systems: <ul style="list-style-type: none"> • Windows 7 • Windows 8 • Windows Server 2008 • Windows Vista 	<ul style="list-style-type: none"> • Java Runtime Environment • Python Runtime Environment
Language supported	<ul style="list-style-type: none"> • Go • Java • JavaScript • PHP • Python • Ruby • Windows and .NET • C++ 	<ul style="list-style-type: none"> • VB.Net • C# • PHP 	<ul style="list-style-type: none"> • Java • Python
Cloud Services and Tools	<ul style="list-style-type: none"> • Amazon Elastic Compute Cloud(EC 2) • AWS • GovCloud (US) • Amazon Relational database services (RDS) 	<ul style="list-style-type: none"> • Windows azure platform training kit • Windows azure software development kit • Microsoft visual studio 2008 service pack 1 	<ul style="list-style-type: none"> • Google search • Gmail • Chrome browser • Google maps
Security	Secure Socket Layer to maintain confidentiality	Filtering routers firewalls Centralized monitoring Cryptographic protection of messages	Google's 2 step verification
Maximum Limit	<ul style="list-style-type: none"> • Amazon S3 store object up to 5 GB • Amazon EC2 (Elastic Block Storage) (20 TB/account limit while in beta) 	Azure has 64 MB limit on individual blobs and also allows you to split a blob into blocks of 4 MB each	Automatic scaling is built in with App Engine No matter how many users you have or how much data your application stores, App Engine can balance to meet your needs

4. CONCLUSION

As there are many vendors, providers are considered for enhancing from different dimensions as a Service market, however, to prove one of the most exciting ones in the cloudspace, and there have been several important factors, such as changes in Pricing policies, Compatibility operatingSystems and languages, supportive services and the appearance of some technology heavy weights. It has been written a comparison of cloud service providers like Amazon AWS, Windows Azure and Google App Engine, to serve as an initial point for anyone looking to take the throw into cloud computing.

REFERENCES

- [1] Dimpi Rani, Rajiv Kumar Ranjan “A Comparative Study of SaaS, PaaS and IaaS in Cloud Computing” International Journal of Advanced Research in Computer Science and Software Engineering Volume 4, Issue 6, June 2014 ISSN: 2277 128X
- [2] <http://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/awslanguages.html>
- [3] https://en.wikipedia.org/wiki/Cloud_computing
- [4] Krishan Kant Lavania , Yogita Sharma , ChandreshBakliwal “A Review on Cloud Computing Model” International Journal on Recent and Innovation Trends in Computing and Communication Volume: 1 Issue: 3 ISSN 2321 – 8169
- [5] Mohamed MagdyMosbah , HanySoliman, MohamadAbou El-Nasr “CURRENT SERVICES IN CLOUD COMPUTING: A SURVEY” International Journal of Computer Science, Engineering and Information Technology (IJCEIT), Vol.3,No.5,October 2013
- [6] I-Hsun Chuang, Syuan-Hao Li, Kuan-Chieh Huang, Yau-Hwang Kuo “An Effective Privacy Protection Scheme for Cloud Computing” ISBN 978-89-5519-155- 4Feb. 13~16, 2011 ICACT2011
- [7] Junchao Li, RuifengGuo, Xiuwu Zhang “Study on Service-Oriented Cloud Conferencing” 978-1-4244-5540-9/10/\$26.00 ©2010 IEEE
- [8] <http://www.explainthatstuff.com/cloud-computing-introduction.html>
- [9] Satish Kumar, Vishal Thakur, Ashok Kumar Kashyap, “A Comparative Study of Different Cloud Services, Cloud Security Issues and Cloud Providers”

