

## Cloud Computing Platforms Comparison

	Amazon AWS	Google App Engine	Microsoft Azure	IBM Smart Business Dev.
<b>focus</b>	General Public Sector	Rapid industry developments	Individual Public with easy application access.	Hybrid, fast & easy deployment or integration for startups.
<b>Infrastructure and virtualization architecture</b>	EC2- Elastic Compute Cloud upon instantiate.	Specifications provided by Google	Servers at backend runs in windows which can be customized, while Azure in frontend runs in .Net	Virtual Machines Instances
<b>Platforms</b>	Infrastructure as a Service(IaaS); Unix & Windows Servers	Platform as a Service(PaaS)	Infrastructure as a Service(IaaS) & Platform as a Service(PaaS); Microsoft Server 2008	Infrastructure as a Service(IaaS); Red Hat, SUSE & Windows
<b>Persistent Storage</b>	EBS(Elastic Block Storage), S3(Simple Storage Service)	Bulk Storage- Cloud MySQL, NoSQL	Standard Application Storage	Bulk Storage-independent of service
<b>Monitoring</b>	Available(Cloud watch)	Available(Google Cloud monitoring)	Available(Azure Ops)	Available(IBM Smart Cloud)
<b>Load Balancing</b>	Supports using Elastic Load Balance	Supports using Engine Load Balancing	Supports using Azure load balancer	Supports both dynamic & elastic load balancing
<b>Message Queues</b>	SQS, SNS	Push Queues	Azure Data Queues	IBM Web Sphere Queues
<b>Development Tools</b>	Amazon management console, Command line APIs, SDKs for Java, PHP, Python.	Java Plugins for Eclipse & Python SDKs, App Engine Platforms	Visual studio , .NET SDK & Azure SDKs	Almost all SDKs for all platforms. Eg. Java plugins for Eclipse.

## Cloud Computing Platforms Comparison

<b>Integration with other services</b>		All the services are designed to work together; Eg: Dynamo DB	Highly supported with the public API's like Maps, GPS, and Android Services etc. Almost everything for APP Engine.	Supported using .Net Service Eg: Azure CDN	Highly supported with most of the services available within the Cloud itself.
<b>Web APIs</b>		Supports	Supports	Supports	Supports
<b>Programming Framework</b>		Customizable Linux based Amazon Machine Image(AMI)	Python, java Beans, PHP, Impala	ASP .NET, Java, Ruby	Most of the Programming languages like Java, PHP, Node JS, Ruby etc.
<b>Pricing</b>	<b>Machine CPU</b>	\$0.12/hr.	\$0.10/hr.	\$0.11/hr.	\$0.10/hr.
	<b>Storage</b>	0.25 GB/month	0.15 GB/month	0.15 GB/month	0.15 GB/month
	<b>I/O</b>	\$0.1/1000 service Requests	\$0.1/1000 service Requests	\$0.1/1000 service Requests	\$0.1/1000 service Requests
	<b>Bandwidth</b>	\$0.10 / GB for Avg IN & OUT	\$0.10 / GB for Avg IN & OUT	\$0.10 / GB for Avg IN & OUT	\$0.10 / GB for Avg IN & OUT

By

Srikar Reddy Mallareddygar

ID# 33