



Overview of Cloud Computing – Day 3



Course Objective

The following will be discussed and practiced during this session:

- Over view of Azure
- Deploying sample application on Azure VM
- Overview of Azure PAAS service offerings
- CSP comparison
- Summary of topics covered



Tea break



CSP Comparison

General comparison of the top three CSPs

General Information	Cloud service providers		
	AWS	Microsoft Azure	Google Cloud Platform
Year of Launch	2006	2010	2012
Service models adopted	IaaS, PaaS, SaaS	IaaS, PaaS, SaaS	IaaS, PaaS, SaaS
Market share (%)	47	10	4
Global infrastructure distribution	49 availability zones within 18 geographical regions	36 distinct regions	5 Global regions and multiple zones within it
Billing pattern	Pay-per-use, Per-second, Per GB hours	Pay-per-use, Per-second, Per GB hours	Pay-per-use, Per-second, Per GB hours
Top customers	NASA, Netflix, CIA, Uniliver, Kellogs, Adobe, BMW, Siemens, Nokia, SAP, Vodafone	DishTv, Mosaic, Frame, University of Victoria, Brain-shark	Apple, Coca-Cola, Whirlpool, Airbus, Philips

Comparison on Compute Services

Service type	Cloud service providers		
	AWS	Microsoft Azure	Google Cloud Platform
Compute service	Elastic compute cloud (EC2)	Virtual machine (VM)	Google Compute Engine
Serverless computing	AWS Lambda functions	Azure functions	Cloud functions
Container service	EC2 Container Service (ECS)	Docker virtual machine extensions	Container Engine Kubernetes Container Registry
Batch jobs	AWS Batch	Azure Batch	None
Application development/Deployment	AWS Elastic beanstalk	Azure Web Apps Azure Cloud Services	Google App Engine

Comparison on Network Services

Service type	Cloud service providers		
	AWS	Microsoft Azure	Google Cloud Platform
Virtual Network	Amazon Virtual Private Cloud (VPC)	Azure VNet	Cloud Virtual Network
Domain Name Services (DNS)	AWS Route 53	Azure DNS	Cloud DNS
Content Delivery Network (CDN)	Amazon CloudFront	Azure CDN	Cloud CDN
Load balancing	Elastic Load Balancing (ELB)	Azure Load Balancer	Cloud Load Balancing
Network Gateway	Amazon VPN	Azure VPN Gateway	Cloud VPN
Dedicated private connectivity	AWS Direct Connect	Azure Express Route	Cloud Interconnect

Progress Review

- ✓ Overview of Cloud Computing
 - ✓ Cloud deployment models
 - ✓ Cloud service models
 - ✓ CSP Comparison
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- AWS Global Infrastructure
 - Overview of AWS
 - AWS – EC2 instance
 - Deploying an application on EC2 instance

Summary of Services

Service	AWS	GCP
Virtual Machine	Elastic Compute Cloud(EC2)	Google Compute Engine(GCE)
Object Storage	Simple Storage Service (S3)	Google Cloud Storage(GCS)
PaaS offering for deploying web applications	Elastic Beanstalk	Google App engine(GAE)

Wingspan References

https://hsbc.onwingspan.com/viewer/lex_auth_012638522204233728363/lex_auth_012638523393720320329

Summary

So far, you were introduced to the below topics

- Cloud Computing, Cloud deployment models and Cloud service models
- Overview of GCP, AWS and Azure cloud
- EC2 instance and application deployment on an EC2 instance
- Google Compute Engine and application deployment on GCE
- Google Cloud Shell
- Deploying a sample application on Azure VM
- AWS S3
- Google cloud Storage
- Introduction to Elastic Beanstalk and Google App Engine
- Comparison of the major cloud service providers



Questions??



Thank You