

## Amazon Web Services Workshop

Techfest is the annual science and technology festival of IIT Bombay. Following is the basic outline of the workshop that would be happening at **Techfest, IIT Bombay**.

### **Overview**

Cloud Computing is the biggest emerging trend in the IT industry, which will change the way computing is done. There are many providers in industry today which offer various cloud services ranging from infrastructure to software. It is important to understand now what cloud computing is, why it is so promising and what impacts it will have on the IT industry.

While these "clouds" are the natural evolution of traditional data centers, they are distinguished by exposing resources (computation, data, and applications) as standards-based Web services and following a "utility" pricing model where customers are charged based on their utilization of computational resources, storage, and transfer of data. They offer subscription-based access to infrastructure, platforms, and applications that are popularly referred to as IaaS (Infrastructure as a Service), PaaS (Platform as a Service), and SaaS (Software as a Service).

### **Content**

#### ***Introduction to Cloud Computing***

- What is the Cloud?
- History of Cloud Computing
- How Cloud Computing Works
- Advantages & Disadvantages
- Applications for Businesses
- Cloud Service Providers

## What makes a Cloud?

### Hands-on demonstration of Cloud Computing

- Creating an account on the Cloud
- Starting a server instance
- Allocating storage and other resources · Deploying an application

## Virtualization

- Virtualization Basics
- Objectives
- Benefits of Virtualization
- Emulation

## Cloud Computing Service Models

- Infrastructure as a Service (IAAS)
- Platform as a Service (PAAS)
- Software as a Service (SAAS)

## Private Clouds & Amazon Web Services

- What is it?
- Advantages & Disadvantages
- Installing a Private Cloud

## AWS Overview

- Amazon S3
- VPC
- Cloudwatch
- Cloud Formation
- Amazon RDS
- Amazon SQS
- Amazon IAM
- Amazon Route 53



- Amazon DynamoDB
- Amazon Storage Gateway

### **Cloud providers and their offerings**

- Amazon
- Microsoft
- Google
- Salesforce.com

### **Amazon Web Services**

- Services offered by Amazon
- Hands-on AWS – Various AWS Services will be seen in action by students with self practise during the session.

### **Hands- On Practical Sessions**

- **Launching Instances**
- **Hosting a Website on Cloud**
- **Creating Linux Servers online**
- **Creating Personal Storage on AWS**
- **Making an application on your cloud to create a automated emailing system**
- **And Many More.**