

Cloud Computing Course Contents

Introduction to Cloud Computing

- Cloud Computing definitions, characteristics
- Cloud Service Models(SAAS,PAAS,IAAS)
- Organizational Cloud Types(Private, Public, Hybrid)
- Benefits & Limitations of Cloud
- Comparison of SAAS,PAAS,IAAS
- Utility Computing
- Elastic Computing

Data in the Cloud

- Virtualization Basics
- Objectives
- Benefits of Virtualization
- Emulation
- Virtualization for Enterprise
- VMware
- Xen

Cloud Platform

- Introduction to all available cloud platforms and its utilization
- Amazon web services
- Google App Engine
- Windows Azure
- Sales force
- Encalyptus

Cloud Security

- Cloud Security Fundamentals
- Vulnerability Assessment Tool For Cloud
- Privacy and Security in Cloud
- Cloud Security Architecture
- Identity Management and Access Control
- Cloud Computing Security Challenges

Issues in Cloud Computing

- Issues in Inter Cloud Computing
- Quality of Services in Cloud Computing
- Data Migration in Cloud
- Streaming in cloud
- Monitoring in Cloud Environment
- Resolving Issues

Google Cloud Platform

- GAE Overview and its features
- GAE Architecture
- Runtime environments
- Installation of GAE
- Data Storage in App Engine
- GAE Services
- Implementation of Google Application
- Deployment of Application on GAE Cloud

Microsoft Azure Cloud Platform

- Azure Introduction
- Azure Architecture
- Azure Web Roles (Configuration, Endpoints, Security, Logging, Load Balancing)
- Azure Installation
- Azure Application Architecture
- Azure Storage
- SQL Azure
- Publishing to the Cloud

Amazon Cloud

- AWS Overview
- Installation of AWS
- Architecture of AWS
- Amazon Simple DB

- Amazon EC2
- Amazon Map Reduce
- Amazon S3
- Amazon Networking
- Application development on Amazon Cloud
- Deployment On Amazon Cloud