
Course: Artificial Intelligence and Machine Learning Code: 20CS51I
WEEK- 2 Cloud Computing**❖ Walking through the administrative console and Cloud SDK**

- ◆ Explore Virtual machines (PaaS, IaaS and SaaS) and storage options
- ◆ Deploy a simple application on the cloud
- ◆ AI Platform overview

❖ Essentials of cloud billing**❖ SLA (Service-Level Agreement)****Session No. 6****cloud SLA**

A cloud SLA (cloud service-level agreement) is an agreement between a cloud service provider and a customer that ensures a minimum level of service is maintained. It guarantees levels of reliability, availability and responsiveness to systems and applications; specifies who governs when there is a service interruption; and describes penalties if service levels are not met.

A cloud infrastructure can span geographies, networks and systems that are both physical and virtual. While the exact metrics of a cloud SLA can vary by service provider, the areas covered are uniform:

- volume and quality of work (including precision and accuracy);
- speed;
- responsiveness; and
- efficiency.

The SLA document aims to establish a mutual understanding of the services, prioritized areas, responsibilities, guarantees and warranties provided by the service provider. It clearly outlines metrics and responsibilities among the parties involved in cloud configurations, such as the specific amount of response time to report or address system failures.

The importance of a cloud SLA

Service-level agreements are fundamental as more organizations rely on external providers for their critical systems, applications and data. A cloud SLA ensures cloud providers meet certain enterprise-level requirements and provide customers with a clearly defined set of deliverables. It also describes financial penalties, such as credits for service time, if the provider fails to live up to the guaranteed terms.

Basis Of	IAAS	PAAS	SAAS
Stands for	Infrastructure as a service.	Platform as a service.	Software as a service.
Uses	IAAS is used by network architects.	PAAS is used by developers.	SAAS is used by the end user.
Access	IAAS gives access to the resources like virtual machines and virtual storage.	PAAS gives access to run time environment to deployment and development tools for application.	SAAS gives access to the end user.
Model	It is a service model that provides virtualized computing resources over the internet.	It is a cloud computing model that delivers tools that are used for the development of applications.	It is a service model in cloud computing that hosts software to make it available to clients.
Technical understanding.	It requires technical knowledge.	Some knowledge is required for the basic setup.	There is no requirement about technicalities company handles everything.
Popularity.	It is popular among developers and researchers.	It is popular among developers who focus on the development of apps and scripts.	It is popular among consumers and companies, such as file sharing, email, and networking.
Cloud services.	Amazon Web Services, sun, vCloud Express.	Facebook, and Google search engine.	MS Office web, Facebook and Google Apps.
Enterprise services.	AWS virtual private cloud.	Microsoft Azure.	IBM cloud analysis.
Outsourced cloud services.	Salesforce	Force.com, Gigaspaces.	AWS, Terremark
User Controls	Operating System, Runtime, Middleware, and Application data	Data of the application	Nothing