

SNS COLLEGE OF TECHNOLOGY



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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING 19ECE308- WIRELESS TECHNOLOGIES FOR IOT

UNIT 3 – DATA COLLECTION, STORAGE AND COMPUTING USING A CLOUD PLATFORM

TOPIC 2 – DEPLOYMENT AND SERVICE MODEL

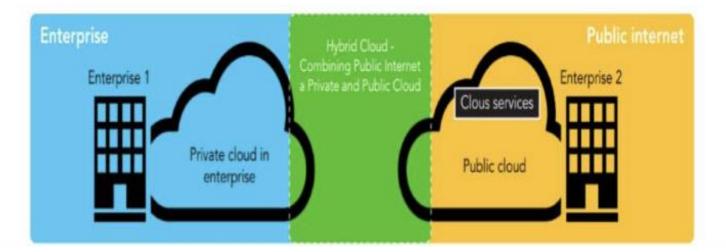


Deployment Model



Deployment models define the type of access to the cloud, i.e., how the cloud is located?

Cloud can have any of the four types of access: Public, Private, Hybrid and Community.





Deployment Models



PUBLIC CLOUD: The Public Cloud allows systems and services to be easily accessible to the general public. Public cloud may be less secure because of its openness, e.g., e-mail.

PRIVATE CLOUD: The Private Cloud allows systems and services to be accessible within an organization. It offers increased security because of its private nature.

COMMUNITY CLOUD: The Community Cloud allows systems and services to be accessible by group of organizations.

HYBRID CLOUD: The Hybrid Cloud is mixture of public and private cloud. However, the critical activities are performed using private cloud while the non-critical activities are performed using public cloud.







Service Models are the reference models on which the Cloud Computing is based.

These can be categorized into three basic service models as listed below:

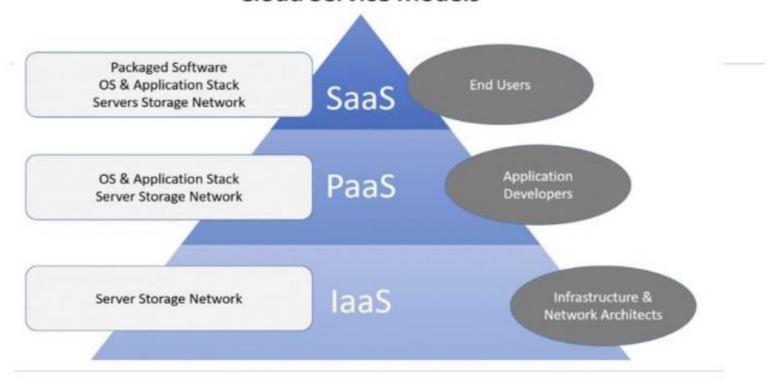
- 1. Infrastructure as a Service (laaS)
- 2. Platform as a Service (PaaS)
- 3. Software as a Service (SaaS)



Cloud Service Models



Cloud Service Models





laas



IaaS is the delivery of technology infrastructure as an on demand scalable service. IaaS provides access to fundamental resources such as physical machines, virtual machines, virtual storage, etc.

- Usually billed based on usage
- Usually multi tenant virtualized environment
- Can be coupled with Managed Services for OS and application support



laas Providers













PaaS



PaaS provides the runtime environment for applications, development & deployment tools, etc. PaaS provides all of the facilities required to support the complete life cycle of building and delivering web applications and services entirely from the Internet.

Typically applications must be developed with a particular platform in mind.

- Multi tenant environments
- Highly scalable multi tier architecture



PaaS Providers









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SaaS



SaaS model allows to use software applications as a service to end users. SaaS is a software delivery methodology that provides licensed multi-tenant access to software and its functions remotely as a Web-based service.

- Usually billed based on usage
- Usually multi tenant environment
- Highly scalable architecture



SaaS







Assessment



Analyze the disadvantages of Cloud computing

Requires a constant Internet connection:

- Cloud computing is impossible if you cannot connect to the Internet.
- Since you use the Internet to connect to both your applications and documents, if you do not have an Internet connection you cannot access anything, even your own documents.
- A dead Internet connection means no work and in areas where Internet connections are few or inherently unreliable, this could be a deal-breaker.





Thank You