



# SNS COLLEGE OF TECHNOLOGY

Coimbatore-36.

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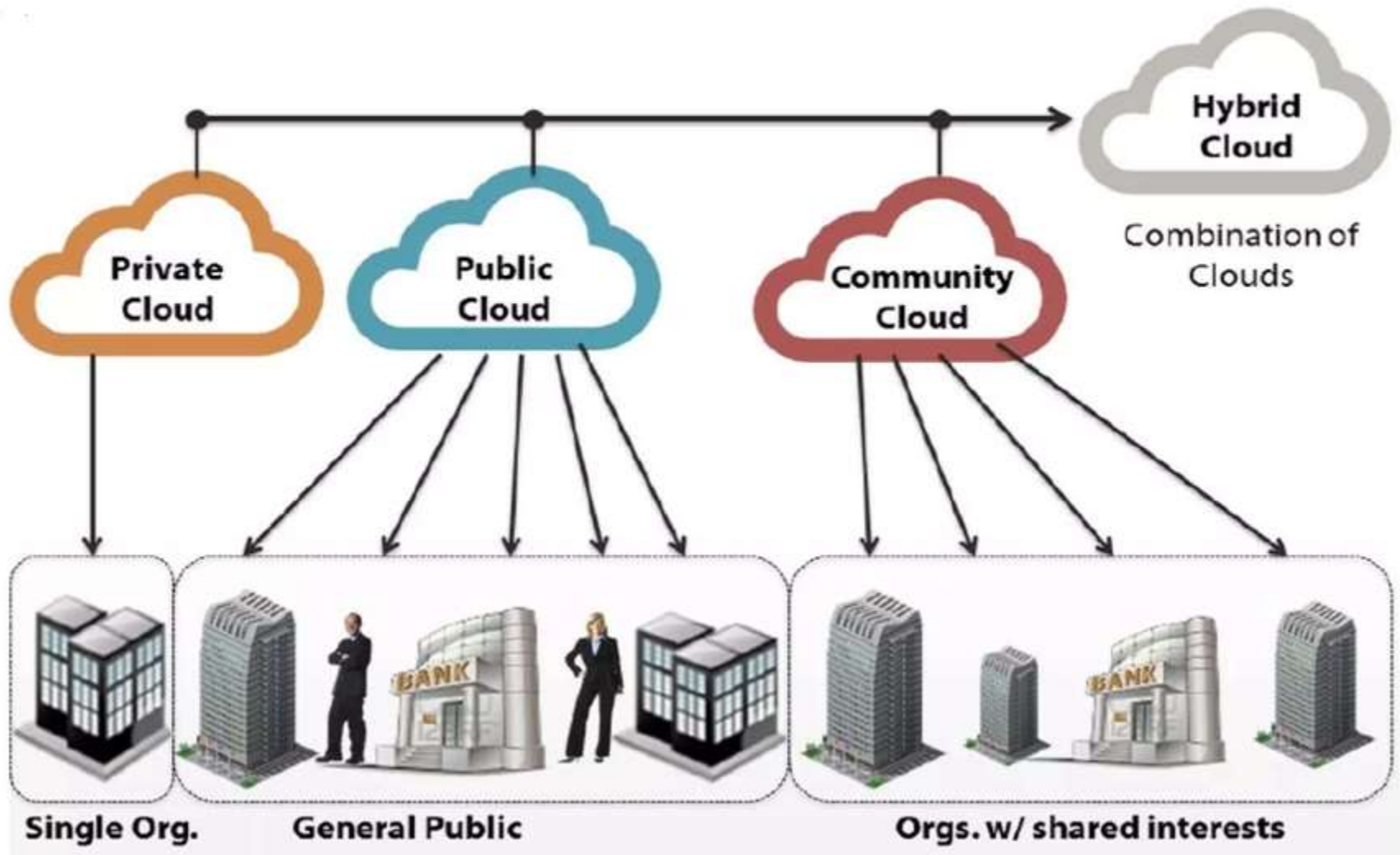


**COURSE NAME : 19CSE310 - Grid and Cloud Computing (Professional Elective II)**

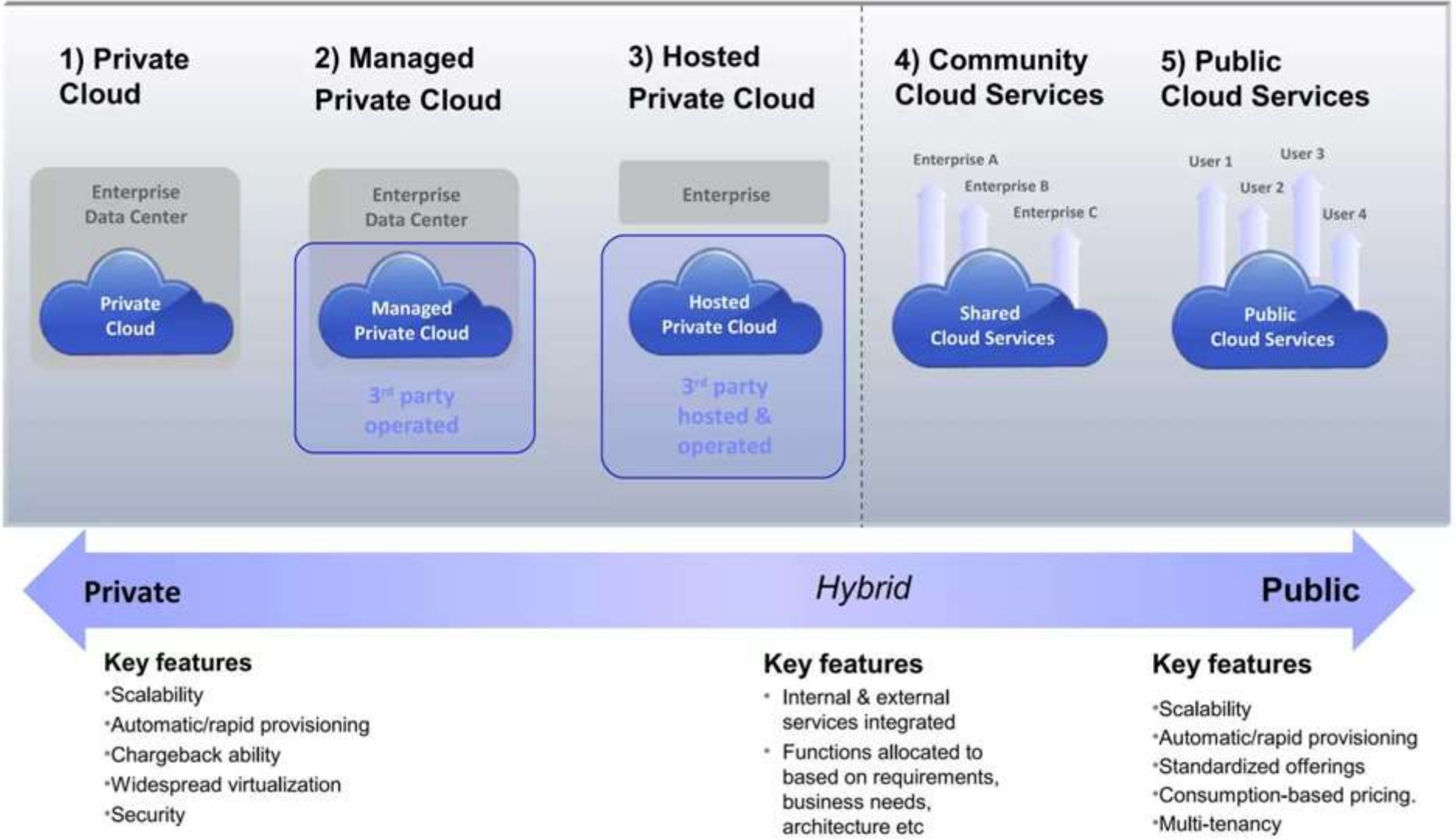
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# There is a spectrum of deployment options for cloud computing



# Cloud delivery models

Customers are choosing a variety of cloud models to meet their unique needs and priorities.



## Private Cloud

On or off premises cloud infrastructure operated solely for an organization and managed by the organization or a third party



## Hybrid Cloud

Traditional IT and clouds (public and private) that remain separate but are bound together by technology that enables data and application portability



## Public Cloud

Available to the general public or a large industry group and owned by an organization selling cloud services



## Traditional IT

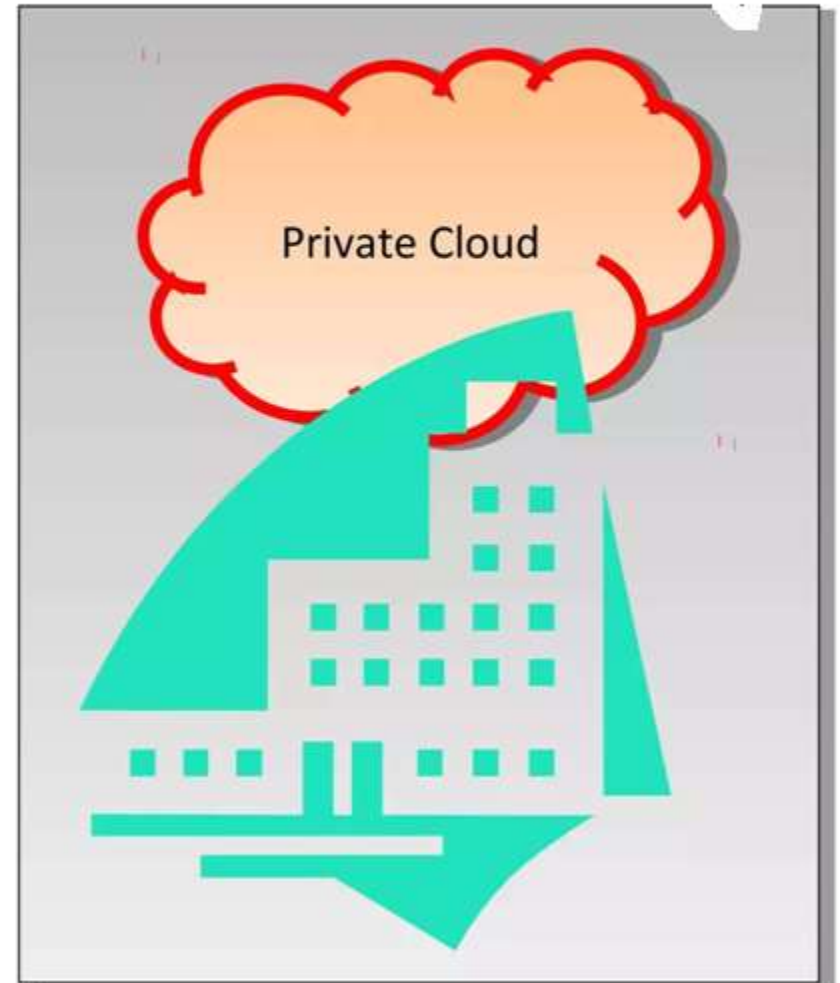
Appliances, pre-integrated systems and standard hardware, software, and networking

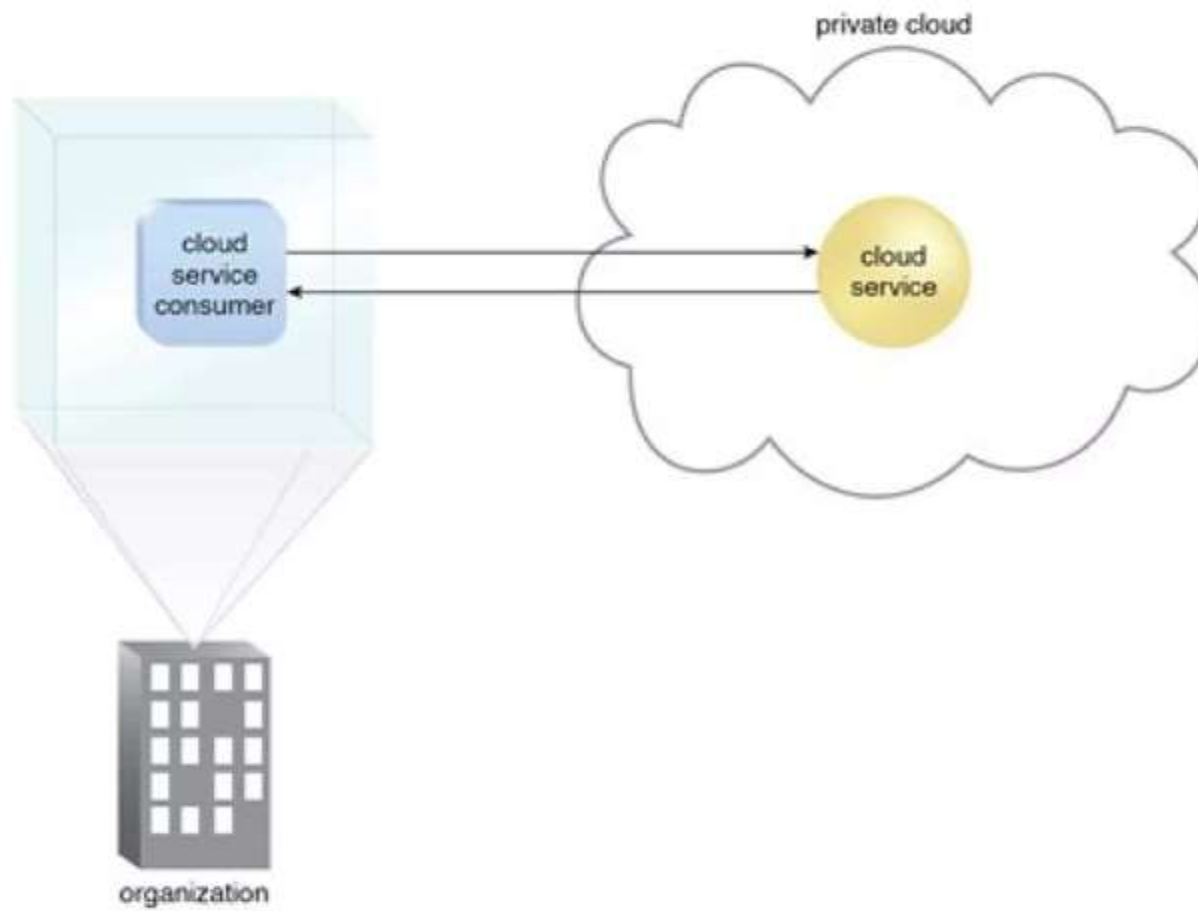


# Private Cloud

- A private cloud is owned by a single organization.
- Private clouds enable an organization to use cloud computing technology as a means of centralizing access to IT resources by different parts, locations, or departments of the organization.
- When a private cloud exists as a controlled environment, the problems described in the Risks and Challenges section do not tend to apply.

- Cloud infrastructure built in house
- Retains control of resources
- More security & privacy
- Can conform to regulatory requirement
- Needs capital investment
- Needs expertise to build and maintain



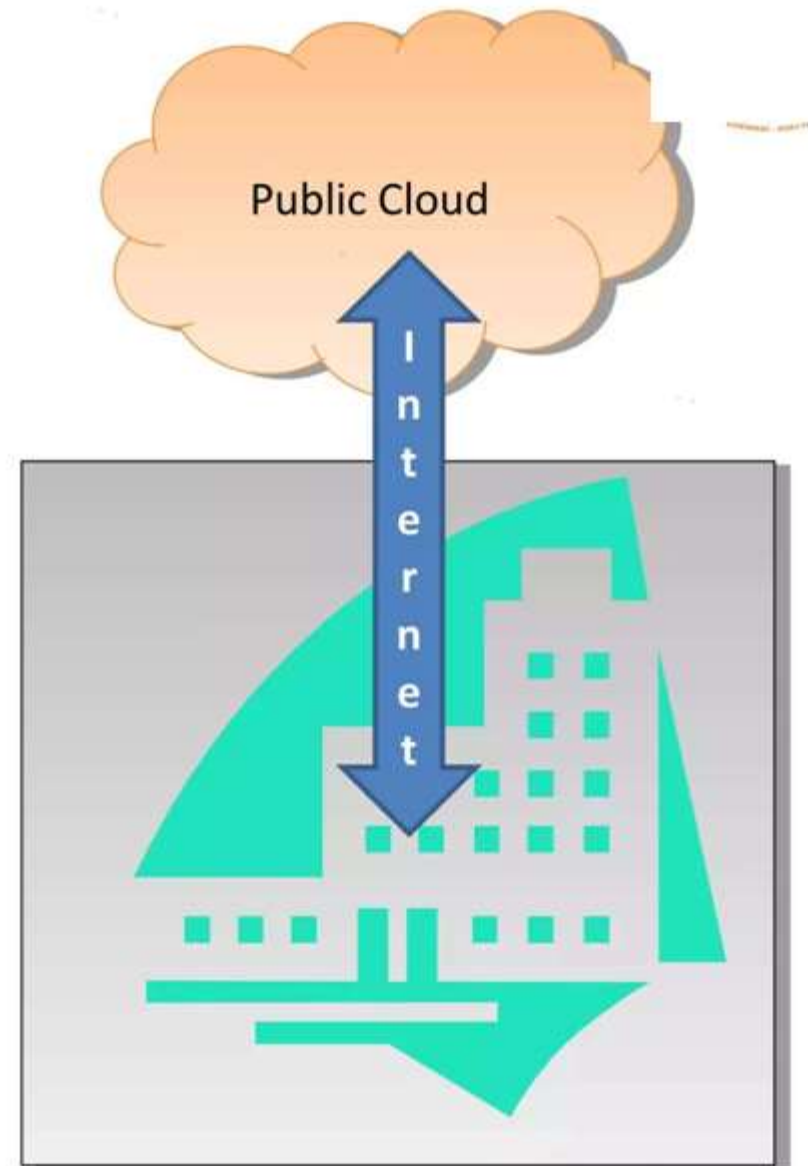


# Public Cloud

- A *public cloud* is a publicly accessible cloud environment owned by a third-party cloud provide
- The IT resources on public clouds are usually provisioned via cloud delivery models .
- The cloud provider is responsible for the creation and on-going maintenance of the public cloud and its IT resources.

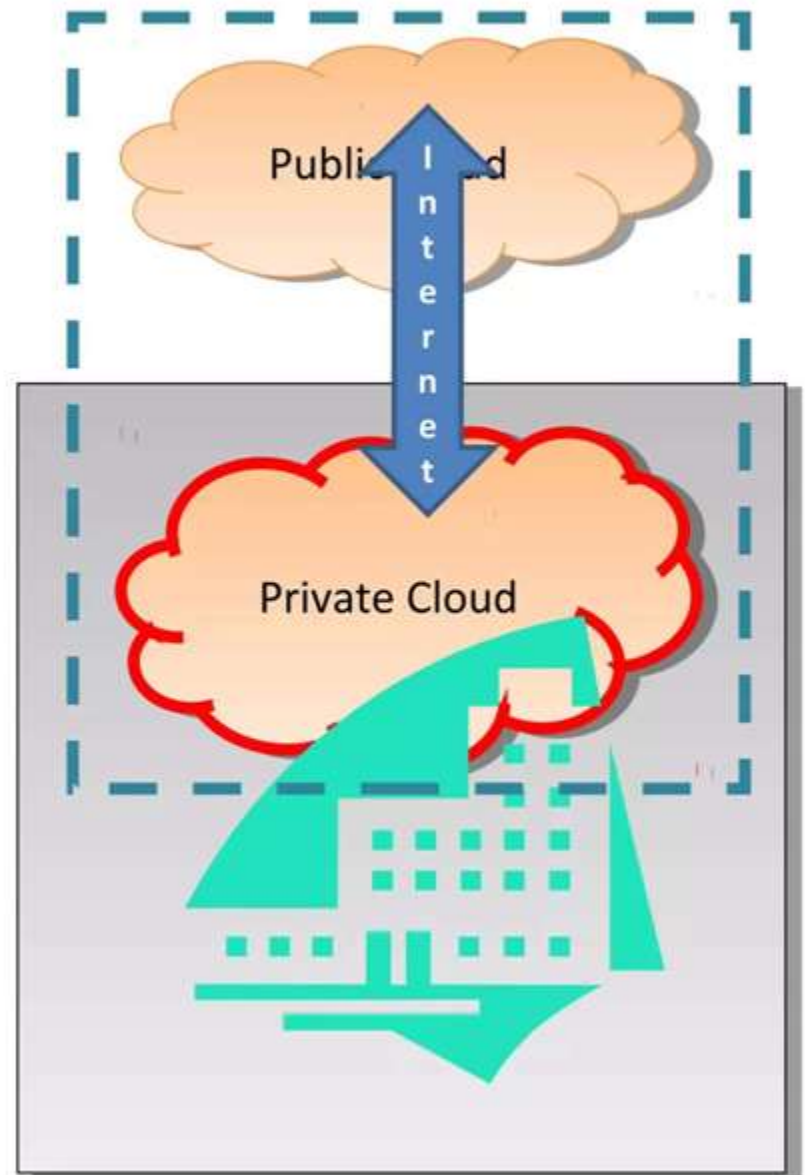


- Available to everyone.
- Anyone can go and signup for the service.
- Economies of Scale due to Size.
- Some public cloud concerns
  - Ownership
  - Control
  - Regulatory compliance
  - Data/Application security
  - Liability for SLA breaches



# Hybrid Clouds

- A hybrid cloud is a cloud environment comprised of two or more different cloud deployment models.
- Best of Both World
- Workload is deployed mostly on private cloud
- Resources can be used from public cloud when there is a surge in peak load (Cloud Burst)



# Community Cloud

- Community clouds are shared by multiple organizations with similar needs and goals.
- They are typically owned and operated by a third-party provider and are used by a specific community, such as educational institutions or government agencies.
- Community clouds provide the benefits of the cloud, such as scalability and cost savings, while maintaining the security and control of a private infrastructure.