

SESSION 5

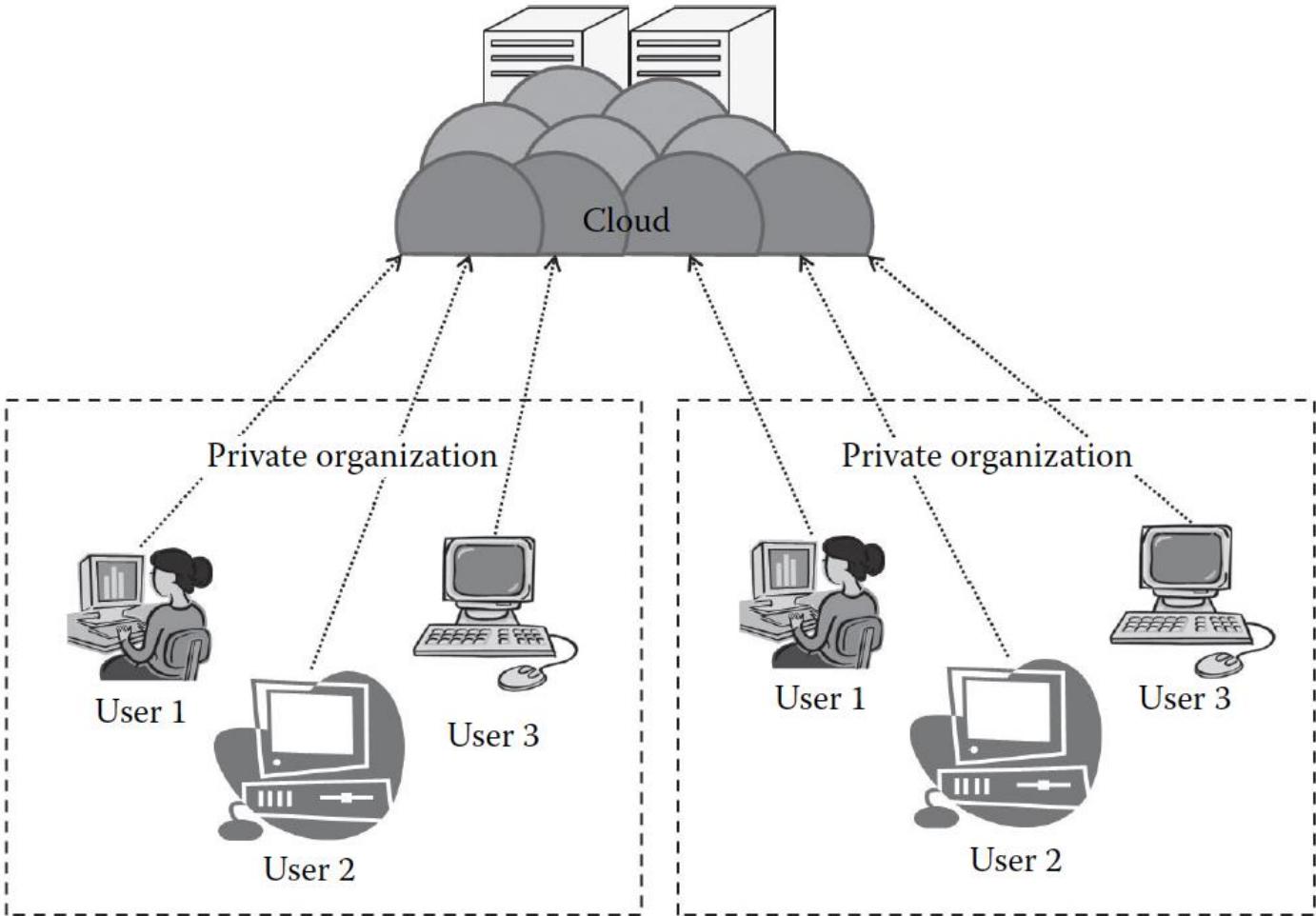
DEPLOYMENT MODELS(PART 2)

OBJECTIVES

- Community Cloud
- Hybrid Cloud

COMMUNITY CLOUD

- According to NIST, a community cloud is provided by one organization from one or more locations to serve the requirements of multiple organizations.
- It is a form of private cloud.
- This means that a community cloud is a



structure that
consumers
security

word a private

COMMUNITY CLOUD'S CHARACTERISTICS

- *Collaborative and distributive maintenance:* The community cloud is wholly collaborative, and usually no single party has full control over the whole cloud
- *Partially secure:* few organizations share the cloud, so there is a possibility that the data can be leaked from one organization to another, though it is safe from the outside world
- *Cost effective:* the whole cloud is being shared by several organizations or a community. Usually, not only cost but every other sharable responsibilities are also shared or divided among the groups

COMMUNITY CLOUD'S SUITABILITY

- Want to establish a private cloud but have financial constraint
- Do not want to complete maintenance responsibility of the cloud
- Want to establish the cloud in order to collaborate with other clouds
- Want to have a collaborative cloud with more security features than the public cloud

THE COMMUNITY CLOUD IS NOT SUITABLE FOR THE FOLLOWING

- Prefer autonomy and control over the cloud
- Does not want to collaborate with other organizations

COMMUNITY CLOUD CLASSIFICATION

- There are two types of community cloud deployments:
 - On-premise community cloud
 - Outsourced community cloud

ON-PREMISE COMMUNITY CLOUD

- On-premise community cloud consists of the cloud deployed within the premises and is maintained by the organizations themselves

ON-PREMISE COMMUNITY CLOUD ISSUES

- Base on the textbook on page 58 explain some issues of On-Premise community Cloud

OUTSOURCED COMMUNITY CLOUD

- In the outsourced community cloud, the cloud is outsourced to a third party. The third party is responsible for maintenance and management of the cloud.

OUTSOURCED COMMUNITY CLOUD ISSUES

- Comparing outsources community cloud issues with on premise community cloud issues. In you opinion which one is the most important: SLA, Network, Security and privacy, Laws, Location, Performance, Maintenance?

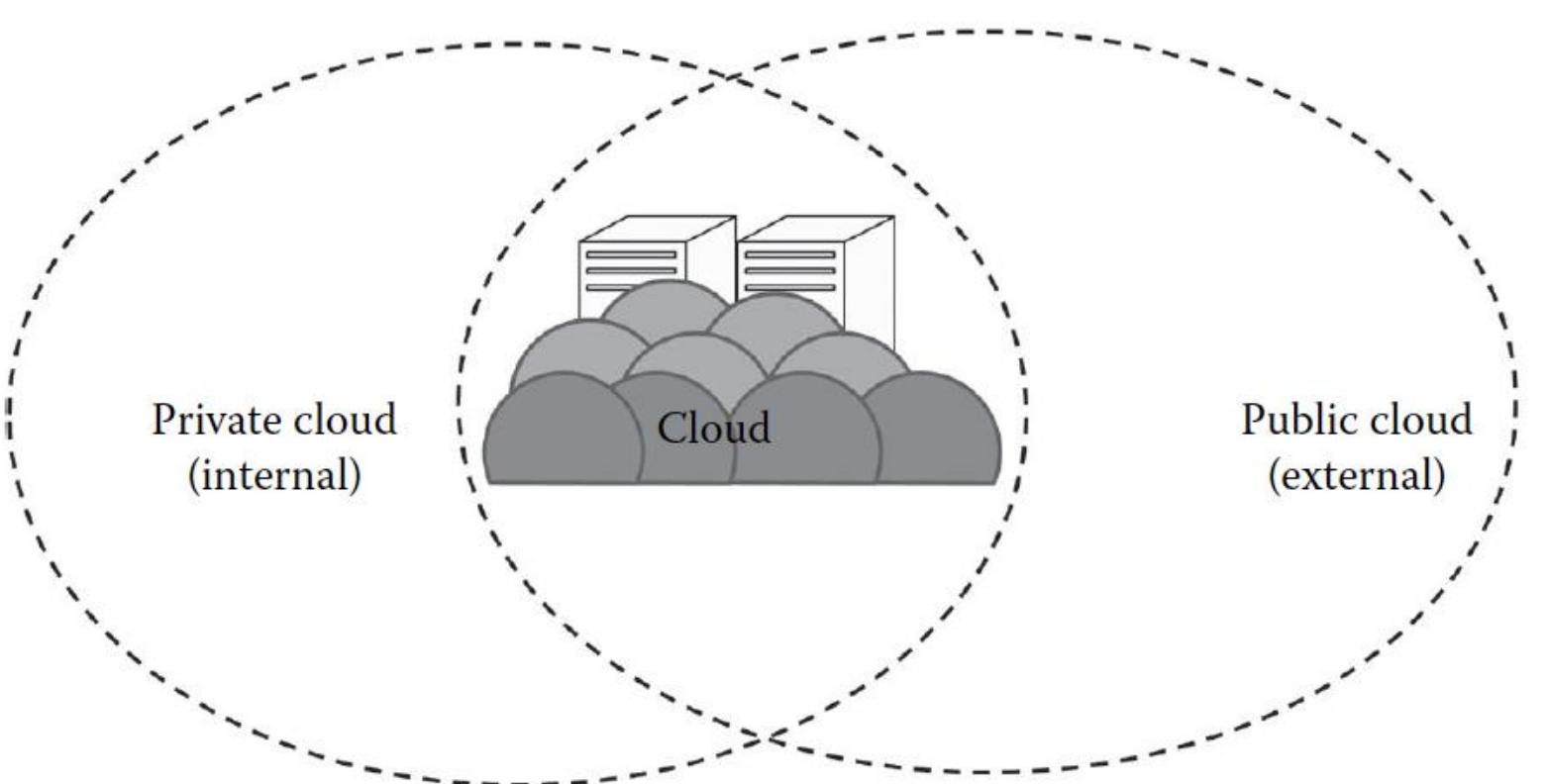
COMMUNITY CLOUD'S ADVANTAGES

- It allows establishing a low-cost private cloud.
- It allows collaborative work on the cloud.
- It allows sharing of responsibilities among the organization.
- It has better security than the public cloud.

COMMUNITY CLOUD'S DISADVANTAGES

- Autonomy of an organization is lost.
- Security features are not as good as the private cloud.
- It is not suitable if there is no collaboration.

HYBRID CLOUD

- According to Gartner, hybrid cloud is a multi-cloud infrastructure that connects multiple cloud entities via APIs or other technologies.
 - The hybrid cloud is a combination of private and public clouds.
 - This is aimed at combining the advantages of private and public clouds.
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- The diagram illustrates a hybrid cloud architecture. In the center is a white cloud icon containing two server racks. A large dashed circle surrounds this central icon. Two dashed lines extend from the bottom of this circle to two separate labels: 'Private cloud (internal)' on the left and 'Public cloud (external)' on the right. The background of the slide features a dark blue gradient with faint, circular, high-tech interface elements.

HYBRID CLOUD'S CHARACTERISTICS

- *Scalable*: Usually, the private with public cloud gives hybrid cloud . The public cloud is used whenever needed; hence, as the public cloud is scalable, the hybrid cloud with the help of its public counterpart is also scalable
- *Partially secure*: The private cloud is considered to be secured, but as the hybrid cloud also uses the public cloud, there is high risk of security breach
- *Stringent SLAs*: As the hybrid cloud involved a public cloud intervention, the SLAs are stringent
- *Complex cloud management*: Cloud management is complex and is a difficult task in the hybrid cloud as it involves more than one type of deployment models and also the numbers of users are high

HYBRID CLOUD'S SUITABILITY

- Organizations that want the private cloud environment with the scalability of the public cloud
- Organizations that require more security than the public cloud

THE HYBRID CLOUD IS NOT SUITABLE, WHERE THE FOLLOWING APPLIES

- Organizations that consider security as a prime objective
- Organizations that will not be able to handle hybrid cloud management

HIBRID CLOUD'S ISSUES

- Students work in group to discuss those issues, the factors can be found on page 62 of the book

HYBRID CLOUD'S ADVANTAGES

- It gives the power of both the private and public clouds.
- It is highly scalable.
- It provides better security than the public cloud.

HYBRID CLOUD'S DISADVANTAGES

- The security features are not as good as the public cloud.
- Managing a hybrid cloud is complex.
- It has stringent SLAs.

SUMMARY

- The types and characteristics of
 - Community cloud
 - On Premise Community cloud
 - Outsourced Community cloud
 - Hybrid cloud

REFERENCES