Mata Kuliah "Cloud Computing/ Komputasi diAwan"

Slide : 4

Presented by : Bambang S, S.Kom, MM, M.Kom

1

√Cloud Computing
√prinsiples Cloud Computing,
√ Ecosytem Cloud,
√ Requirement for cloud computing,
√ Aplikasi Cloud — 1. Cloud Computing Fundamental

√Cloud Computing : IT as a Service
√Cloud Computing Security — 2. Cloud Computing Technologies and applications
√Cloud Computing Model Application Metodology

√Cloud Architecture — 3. Cloud Computing Architecture Management
√Anatomy of cloud
√Network connectivity in cloud computing
√Application on the cloud
√Managing the cloud

√Infrastructure as a service
√Platform as a service
√Software as a service

4. Cloud Service Model

5. Cloud Deployment Model

MK. Cloud Computing (Dosen : Bambang S)

6. Technological Drivers for Cloud Computing
√SOA and cloud
√Multi core techology
√Memory and Storage Technology
√Web 2.0
√Web 3.

7. Virtualization
√Virtualisation Opportunities
√Approaches to Virtualization
√From Virtualisation to Cloud Computing

8. Cloud Service Provider
√Google
√Amazaon Web Services
√Microsoft
√IBM
√SAP Labs
√VMWare

9-12 Presentasi Kelompok

UAS

UTS

Cloud Deployment Model

◉ Deployment models can be defined as the different ways in which the cloud can be deployed. These models are fully user centric, that is, these depend on users' requirement and convenience.

◉ there are four types of deployment models in the cloud:

1. Private Cloud
2. Public Cloud
3. Community Cloud
4. Hybrid Cloud

FIGURE 4.1
Cloud deployment models.
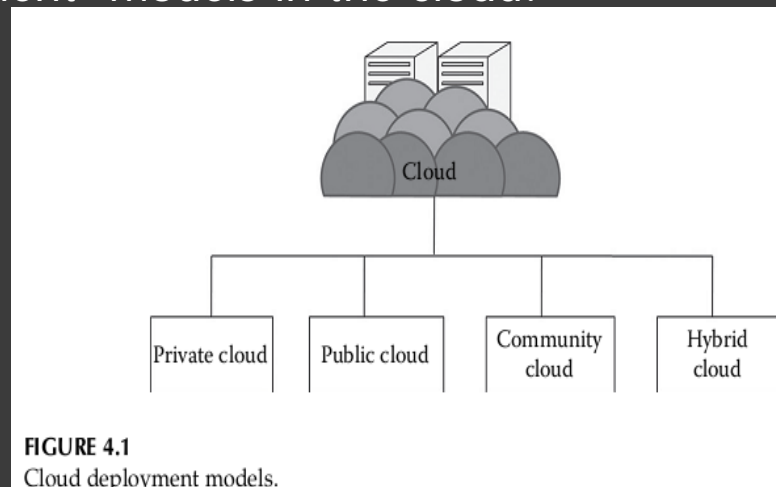
• The classification of the cloud is based on several parameters such as the size of the cloud (number of resources), type of service provider, location, type of users, security, and other issues

M.K KK

Bambang S,S.Kom, MM, M.Kom

3

1. Private Cloud

Private organization

Cloud

User 1   User 2   User 3
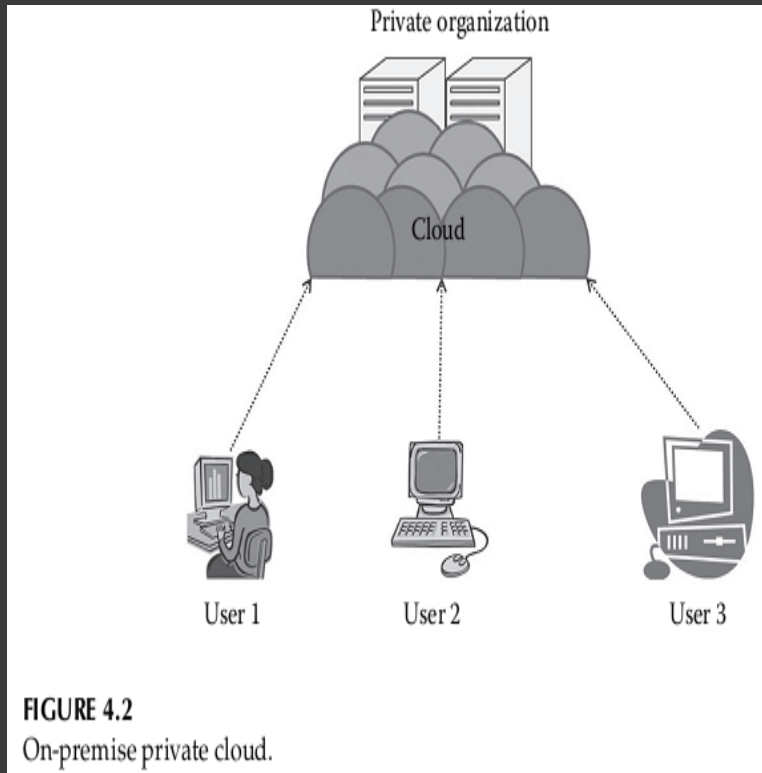
FIGURE 4.2
On-premise private cloud.

1. According to the National Institute of Standards and Technology (NIST), private cloud can be defined as the cloud infrastructure that is provisioned for exclusive use by a single organization comprising multiple consumers (e.g., business units).
2. It is usually private to the organization but can be managed by the organization or any other third party.
3. Private cloud can be deployed using Opensource tools such as Openstack [2], Eucalyptus [3].

M.K KK

1. Private Cloud

FIGURE 4.2
On-premise private cloud.
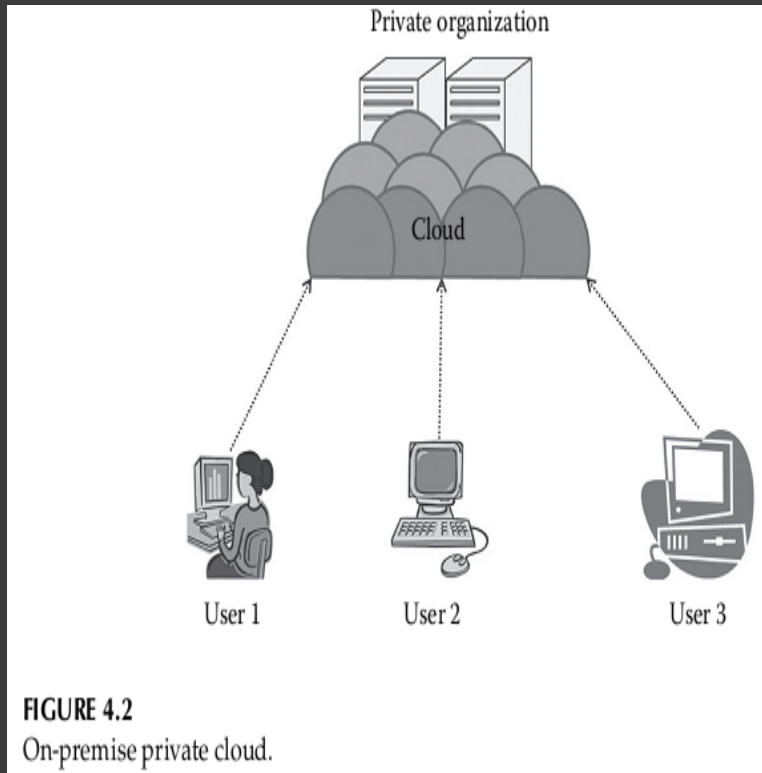
Characteristic Private Cloud :

1. Secure : The private cloud is secure. This is because usually the pri-vate cloud is deployed and managed by the organization itself, and hence there is least chance of data being leaked out of the cloud.
2. Central control: The organization mostly has full control over the cloud as usually the private cloud is managed by the organization itself.
3. Weak SLAs: Formal SLAs may or may not exist in a private cloud. But if they exist they are weak as it is between the organization and the users of the same organization.

M.K KK

1. Private Cloud

It also signifies the most suitable conditions and environment where this cloud model can be used, such as the following:

• The organizations or enterprises that require a separate cloud for their personal or official use.
• The organizations or enterprises that have a sufficient amount of funds as managing and maintaining a cloud is a costly affair.
• The organizations or enterprises that consider data security to be important.
• The organizations that want autonomy and complete control over the cloud.
• The organizations that have a less number of users.
• The organizations that have prebuilt infrastructure for deploying the cloud and are ready for timely maintenance of the cloud for effi -cient functioning.
• Special care needs to be taken and resources should be available for troubleshooting.
The private cloud platform is not suitable for the following:
• The organizations that have high user base
• The organizations that have financial constraints
• The organizations that do not have prebuilt infrastructure

M.K KK   Bambang S,S.Kom,   MM, M.Kom

2. Public Cloud

Not Yet , See @ page 53

M.K KK

Bambang S,S.Kom, MM, M.Kom

Terima Kasih, Wassalam, Thanks, Matur Nuwun, Tse-se, Arigato