

DEPARTMENT OF STATISTICS

MCA, PU

Unit -4 Big-Data Cloud Computing

Types of Cloud Computing

1 PUBLIC CLOUD

The **Public Cloud** allows systems and services to be easily accessible to the general public. It is less secure because of its openness, e.g., e-mail.

2 Private Cloud

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

3 Community Cloud

The **Community Cloud** allows systems and services to be accessible by group of organizations.

4 Hybrid Cloud

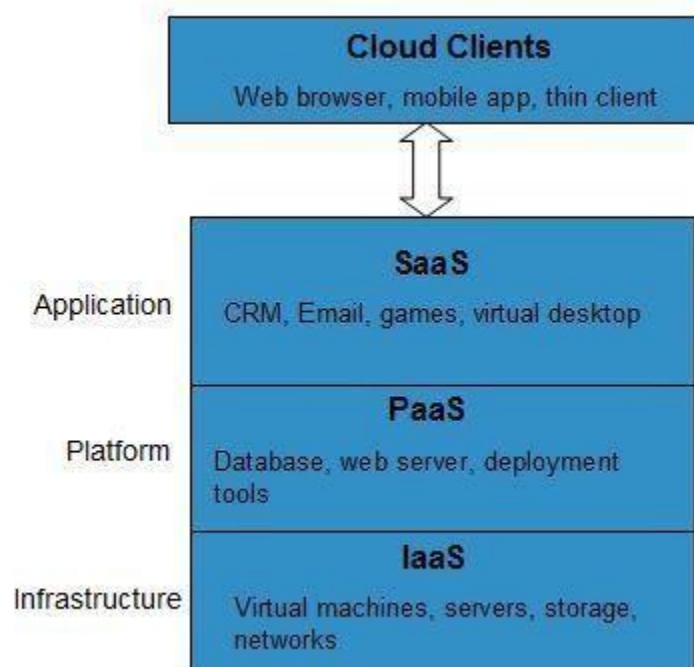
The **Hybrid Cloud** is mixture of public and private cloud. However, the critical activities are performed using private cloud while the non-critical activities are performed using public cloud.

SERVICE MODELS MODEL OF CLOUD COMPUTING

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 (IaaS)**
2. **Platform as a Service (PaaS)**
3. **Software as a Service (SaaS)**

There are many other service models all of which can take the form like **XaaS**, i.e., **Anything as a Service**. This can be **Network as a Service**, **Business as a Service**, **Identity as a Service**, **Database as Service** or **Strategy as a Service**.



INFRASTRUCTURE AS A SERVICE (IAAS)

IaaS provides access to fundamental resources such as physical machines, virtual machines, virtual storage, etc.

PLATFORM AS A SERVICE (PAAS)

PaaS provides the runtime environment for applications, development & deployment tools, etc.

SOFTWARE AS A SERVICE (SAAS)

SaaS model allows to use software applications as a service to end users.