DEPLOYMENT MODELS:

There are four primary cloud deployment models :

- Public Cloud
- Private Cloud
- Community Cloud
- Hybrid Cloud

Public Cloud

The cloud infrastructure is made available to the general public or a large industry group and is owned by an organization selling cloud services. Also known as external cloud or multi-tenant cloud, this model essentially represents a cloud environment that is openly accessible.

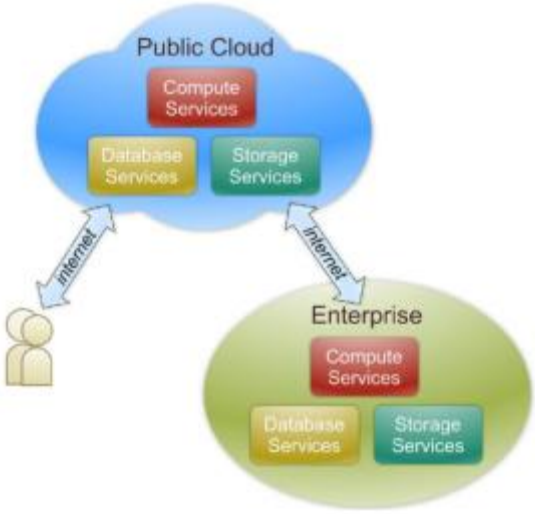

Fig: Public Cloud

Public Cloud is a type of cloud hosting that allows the accessibility of systems & its services to its clients/users easily. Some of the examples of those companies which provide public cloud facilities are IBM, Google, Amazon, Microsoft, etc. This cloud service is open for use. This type of cloud computing is a true specimen of cloud hosting where the service providers render services to various clients. From the technical point of view, there is the least difference between private clouds and public clouds along with the structural design. Only the security level depends based on the service providers and the type of cloud clients use. Public cloud is better suited for business purposes for managing the load. This type of cloud is economical due to the decrease in capital overheads.

Private Cloud:

Private Cloud also termed as 'Internal Cloud'; which allows the accessibility of systems and services within a specific boundary or organization. The cloud platform is implemented in a cloud-based secure environment that is guarded by advanced firewalls under the surveillance of the IT

department that belongs to a particular organization. Private clouds permit only authorized users, providing the organizations greater control over data and its security. Business organizations that have dynamic, critical, secured, management demand based requirement should adopt Private Cloud.

The cloud infrastructure is operated solely for an organization. It may be managed by the organization or a third party and may exist on premise or off premise. Also referred to as internal cloud or on-premise cloud, a private cloud intentionally limits access to its resources to service consumers that belong to the same organization that owns the cloud.

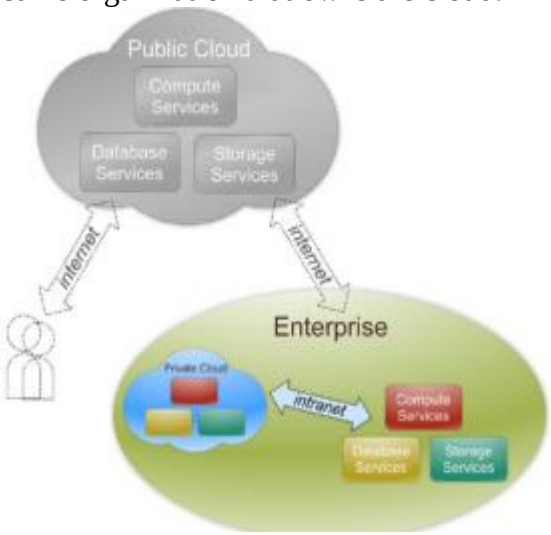

Fig: Private Cloud

Community Cloud

The cloud infrastructure is shared by several organizations and supports a specific community that has shared concerns (e.g., mission, security requirements, policy, and compliance considerations). Community Cloud is another type of cloud computing in which the setup of the cloud is shared manually among different organizations that belong to the same community or area. Example of such a community is where organizations/firms are there along with the financial institutions/banks. A multi-tenant setup developed using cloud among different organizations that belong to a particular community or group having similar computing concern.For joint business organizations, ventures, research organizations and tenders community cloud is the appropriate solution. Selection of the right type of cloud hosting is essential in this case. Thus, community-based cloud users need to know and analyze the business demand first.

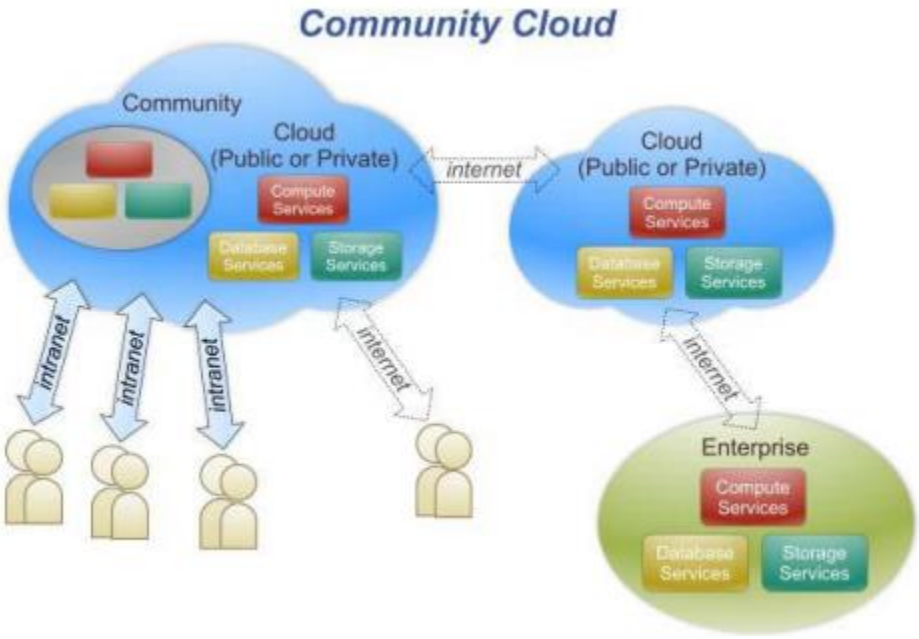

Fig: Community Cloud

Hybrid Cloud

The cloud infrastructure is a composition of two or more clouds (private, community, or public) that remain unique entities but are bound together by standardized or proprietary technology that enables data and application portability (e.g., cloud bursting for load-balancing between clouds).
Hybrid Cloud is another cloud computing type, which is integrated, i.e., it can be a combination of two or more cloud servers, i.e., private, public or community combined as one architecture, but remain individual entities. Non-critical tasks such as development and test workloads can be done using public cloud whereas critical tasks that are sensitive such as organization data handling are done using a private cloud. Benefits of both deployment models, as well as a community deployment model, are possible in a hybrid cloud hosting. It can cross isolation and overcome boundaries by the provider; hence, it cannot be simply categorized into any of the three deployments - public, private or community cloud.

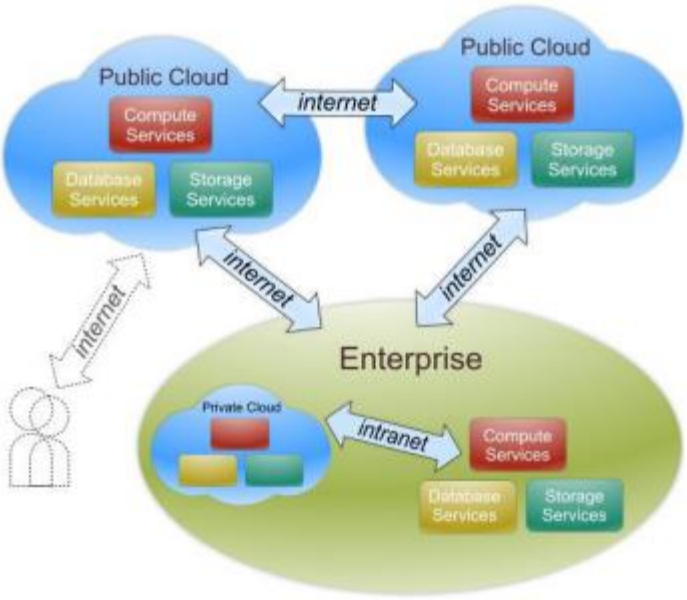

Fig: Hybrid Cloud