

❖ Grid Computing or Cloud Computing?

Grid computing is often confused with cloud computing. Grid computing is a form of distributed computing that implements a virtual supercomputer made up of a cluster of networked or Internetworked computers acting into perform very large tasks.

“Many cloud computing deployments today are powered by grid computing”

implementations and are billed like utilities, but cloud computing can and should be seen as an evolved next step away from the grid utility model. There is an ever-growing list of providers that have successfully used cloud architectures with little or no centralized infrastructure or billing systems, such as the peer-to-peer network **BitTorrent** and the volunteer computing initiative [SETI@home.8](#) Service commerce platforms are yet another variation of **SaaS** and **MSPs**. This type of cloud computing service provides a centralized service hub that users interact with.

Currently, the most often used application of this platform is found in financial trading environments or systems that allow users to order things such as travel or personal services from a common platform (**e.g., Expedia.com or Hotels.com**), which then coordinates pricing and service delivery within the specifications set by the user.

❖ Is the Cloud Model Reliable?

The majority of today’s cloud computing infrastructure consists of time-tested and highly reliable services built on servers with varying levels of virtualized technologies, which are delivered via large data centers operating under service-level agreements that require **99.99%** or better uptime.

Commercials offerings have evolved to meet the quality-of-service requirements of customers and typically offer such service-level agreements to their customer’s. From users’ perspective, the cloud appears as a single point of access for all their computing needs. These cloud-based services are accessible anywhere in the world, as long as an Internet connection is available. Open standards and open-source software have also been significant factors in the growth of cloud computing,,

❖ Benefits of Using a Cloud Model

Because customers generally do not own the infrastructure used in cloud Computing environments, they can forgo capital expenditure and consume. Resources as a service by just paying for what they use. Many cloud Computing offerings have adopted the utility computing and billing model.

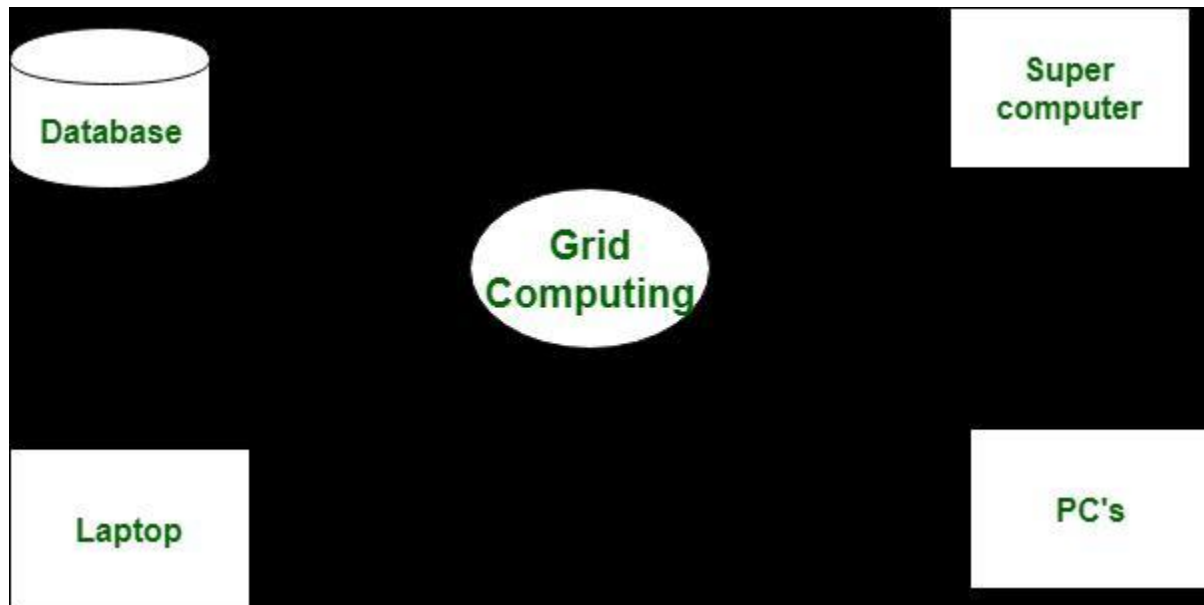
Described above, while others bill on a subscription basis. By sharing computing power among multiple users, utilization rates are generally greatly Improved, because cloud computing servers are not sitting dormant for lack Of use. This factor alone can reduce infrastructure costs significantly and Accelerate the speed of applications development.

A beneficial side effect of using this model is that computer capacity

Increases dramatically, since customers do not have to engineer their application's for peak times, when processing loads are greatest. Adoption of the Cloud computing model has also been enabled because of the greater availability of increased high-speed bandwidth. With greater enablement, Though, there are other issues one must consider, especially legal ones.

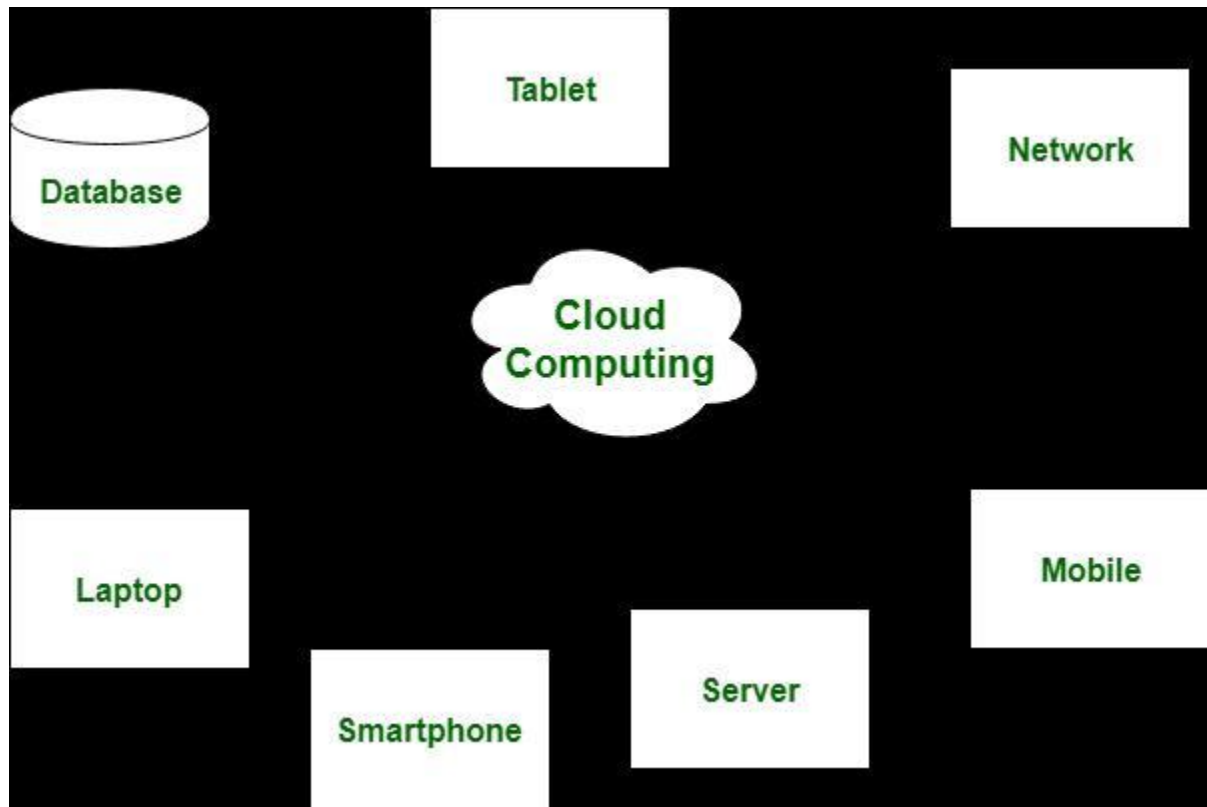
❖ Grid Computing:

Grid Computing is a Distributed computing architecture. In grid computing, resources are used in collaborative pattern, and also in grid computing, the users do not pay for use.



❖ Cloud Computing:

Cloud Computing is a Client-server computing architecture. In cloud computing, resources are used in centralized pattern and cloud computing is a high accessible service. It is a pay and use business means, in cloud computing, the users pay for the use



Let's see the difference between cloud and grid computing which are given below:

Cloud Computing.

Grid Computing

1. Cloud computing is a Client-server computing architecture.	While it is a Distributed computing architecture.
2. Cloud computing is a centralized executive.	While grid computing is a decentralized executive.
3. In cloud computing, resources are used in centralized pattern.	While in grid computing, resources are used in collaborative pattern.
4. It is more flexible than grid computing.	While it is less flexible than cloud computing.
5. In cloud computing, the users pay for the use.	While in grid computing, the users do not pay for use.
6. Cloud computing is a high accessible service..	While grid computing is low scalable in comparison to cloud computing
7. It is highly scalable as compared to grid computing. .	While grid computing is a low accessible service
8. It can be accessed through standard web protocols.	While it is accessible through grid middleware.
9. Cloud computing is based on service-oriented.	Grid computing is based on application-oriented. .
10. Cloud computing uses service like IAAS, PAAS, SAAS	Grid computing uses service like distributed computing, distributed pervasive, distributed information.
