

كلية الرشيد الجامعة
قسم هندسة تقنيات الحاسوب
المرحلة الرابع

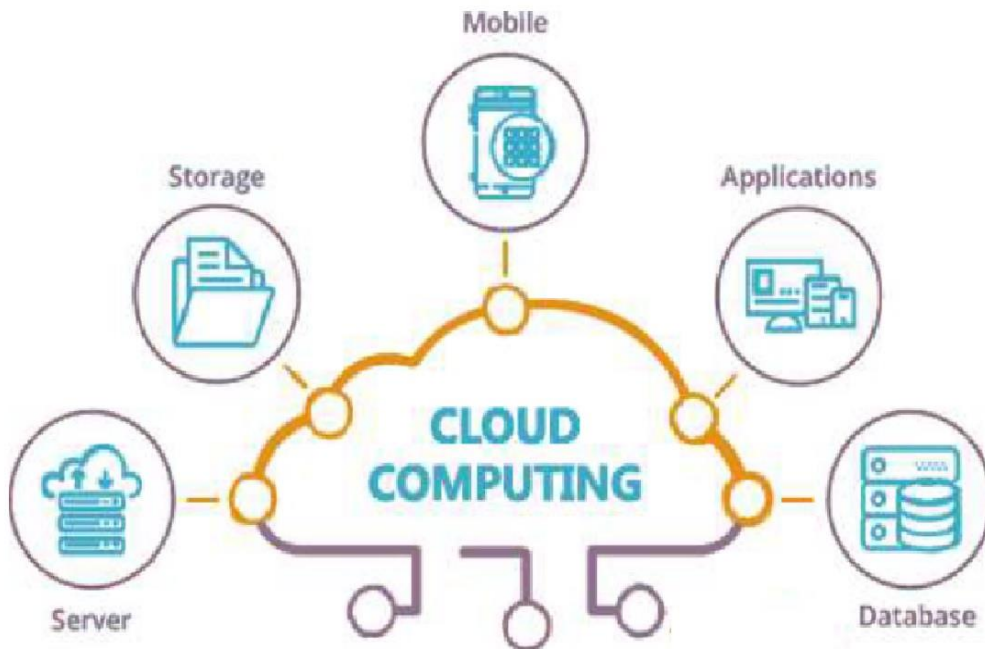
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Cloud Computing

Definitions

“A model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.”



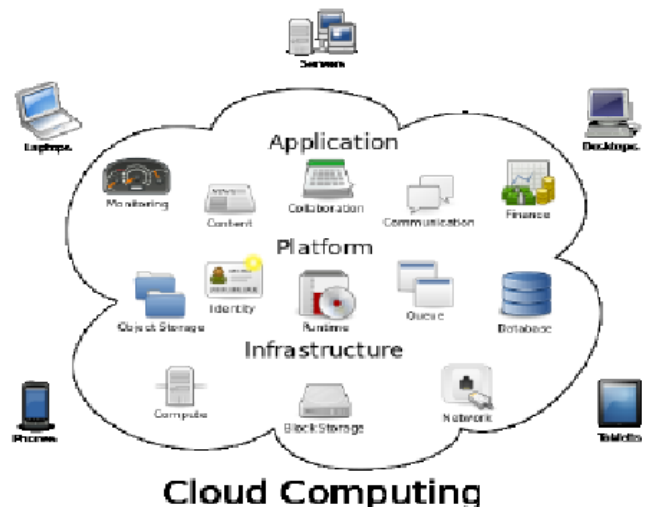
Overview

- Cloud computing in computer science is analogous to electricity grid over a electric network.
- Concept of converged infrastructure and shared services.
- Maximizing the effectiveness of the shared resources.
- Resources are shared by multiple users.
- Resources are dynamically reallocated as per demand.
- Efficient use of computing power thus being eco-friendly (less power, air conditioning, rack space, etc.).
- Multiple users can work on a machine.
- Users can retrieve and update the data with flexible licenses for different applications.

Cloud Computing

- **Cloud computing** (Utility and Grid Computing).
- Clouds are of three types
 - public, private or hybrid.

Creating a groups of scalable hardware and software that allow remote computation, data storage and access using "Services".



relevant technologies

- [Mainframe computer](#) — Powerful computers used for critical applications for bulk data processing.
- [Peer-to-peer](#) — Distributed Architecture without central coordination. Participants are both suppliers and consumers of resources (in contrast to the traditional client–server model).
- [Grid computing](#) — computer are composed into a cluster using networked, cluster is acting as converged resource.
- [Utility computing](#) — The package of computing resources (CPU and storage) are charged according to the pay-as-you-go.
- [Service oriented Computing](#): This organize and utilize the distributed services offered by different owners. It gives a formal way of offering, discover, interaction with the flexibility to orchestrate according to requirement.

