cloud computing

Cloud computing is a general term for the delivery of hosted services over the Internet.

Cloud computing promises several attractive benefits for businesses and end users. Three of the main benefits of cloud computing include:

• Self-service provisioning: End users can spin up computing resources for almost any type of workload on-demand.

• Elasticity: Companies can scale up as computing needs increase and then scale down again as demands decrease.

• Pay per use: Computing resources are measured at a granular level, allowing users to pay only for the resources and workloads they use.

Cloud computing services can be private, public or hybrid.

* Private cloud services are delivered from a business' data center to internal users.
* In the public cloud model, a third-party provider delivers the cloud service over the Internet.
* Hybrid cloud is a combination of public cloud services

Data Mining

Data mining, the extraction of hidden predictive information from large databases, is a powerful new technology with great potential to help companies focus on the most important information in their data warehouses. Data mining tools predict future trends and behaviors, allowing businesses to make proactive, knowledge-driven decisions. The automated, prospective analyses offered by data mining move beyond the analyses of past events provided by retrospective tools typical of decision support systems.

Networking

A network is a group of two or more [computer systems](http://www.webopedia.com/TERM/C/computer_system.html) linked together. There are many types of [computer](http://www.webopedia.com/TERM/C/computer.html) [networks](http://www.webopedia.com/TERM/N/network.html), including the following:

 **[local-area networks (LANs)](http://www.webopedia.com/TERM/L/local_area_network_LAN.html):** The computers are geographically close together (that is, in the same building).

 **[wide-area networks (WANs)](http://www.webopedia.com/TERM/W/wide_area_network_WAN.html):** The computers are farther apart and are connected by telephone lines or radio waves.

 **[campus-area networks (CANs)](http://www.webopedia.com/TERM/C/CAN.html):** The computers are within a limited geographic area, such as a campus or military base.

 **[metropolitan-area networks MANs)](http://www.webopedia.com/TERM/M/MAN.html):** A data network designed for a town or city.

 **[home-area networks (HANs)](http://www.webopedia.com/TERM/H/HAN.html):** A network contained within a user's home that connects a person's digital devices.

**Network security**

**Network security** is protection of the access to files and directories in a computer**network** against hacking, misuse and unauthorized changes to the system. An example of **network security** is an anti virus system. YourDictionary **definition** and usage example.

Mobile Computing

Mobile Computing is a technology that allows transmission of data, voice and video via a computer or any other wireless enabled device without having to be connected to a fixed physical link. The main concept involves −

* Mobile communication
* Mobile hardware
* Mobile software

**Image processing**

**Image processing** is a method to convert an image into digital form and perform some operations on it, in order to get an enhanced image or to extract some useful information from it. It is a type of signal dispensation in which input is image, like video frame or photograph and output may be image or characteristics associated with that image. Usually **Image Processing**system includes treating images as two dimensional signals while applying already set signal processing methods to them

***Multimedia***

***Multimedia*** is the field concerned with the computer-controlled integration of text, graphics, drawings, still and moving images (Video), animation, audio, and any other media where every type of information can be represented, stored, transmitted and processed digitally.

Hypermedia can be considered as one of the multimedia applications.

**Software engineering**

**Software engineering** is a field of [engineering](https://simple.wikipedia.org/wiki/Engineering), for [designing](https://simple.wiktionary.org/wiki/design) and [writing](https://simple.wikipedia.org/wiki/Writing) [programs](https://simple.wikipedia.org/wiki/Computer_program) for [computers](https://simple.wikipedia.org/wiki/Computer) or other [electronic](https://simple.wikipedia.org/wiki/Electronics) devices. A software engineer, or [programmer](https://simple.wikipedia.org/wiki/Programmer), writes software (or changes existing software) and compiles software using methods that make it better quality. Better quality software is easier to use, and the code is easier to understand, to maintain, and to add new features. Becoming a software engineer requires university level classes and practice writing code. Software engineering can be very difficult work.[[1]](https://simple.wikipedia.org/wiki/Software_engineering#cite_note-1) Software engineering is often done as part of a team.

Grid Computing

Interconnected computer systems where the machines utilize the same resources collectively. Grid computing usually consists of one main computer that distributes information and tasks to a group of networked computers to accomplish a common goal. Grid computing is often used to complete complicated or tedious mathematical or scientific calculations.