

## What is Cloud Computing Technology?

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### *Анотація*

*У доповіді розповідається про хмарні технології та їх використання у повсякденному житті.*

**Ключові слова:** хмарні технології, сховище, жорсткий диск, інфраструктура, традиційне апаратне забезпечення, хмарні додатки, фізичні сервера, бази даних, мережеве з'єднання, центральний сервер, клієнтські пристрої, віртуалізація, автоматизація.

### *Abstract*

*The report discusses cloud technologies and their use in everyday life.*

**Key words:** cloud technology, storage, hard drive, infrastructure, traditional hardware, cloud applications, physical server, databases, network connection, central server, client devices, virtualization, automation.

Cloud technology is the basis of future technological breakthroughs in society. They will open up unprecedented opportunities for artificial intelligence.

Cloud computing technology gives users access to storage, files, software, and servers through their internet-connected devices: computers, smartphones, tablets, and wearables. Cloud computing providers store and process data in a location that's separate from end users.

Essentially, cloud computing means having the ability to store and access data and programs over the internet instead of on a hard drive. This means businesses of any size can harness powerful software and IT infrastructure to become bigger, leaner, and more agile, as well as compete with much larger companies. Unlike with traditional hardware and software, cloud computing helps businesses stay at the forefront of technology without having to make large investments in purchasing, maintaining, and servicing equipment themselves.

What's more cloud computing works by enabling client devices to access data and cloud applications over the internet from remote physical servers, databases and computers.

In a word an internet network connection links the front end, which includes the accessing client device, browser, network and cloud software applications, with the back end, which consists of databases, servers and computers. The back end functions as a repository, storing data that is accessed by the front end.

The thing is communications between the front and back ends are managed by a central server. The central server relies on protocols to facilitate the exchange of data. The central server uses both software and middleware to manage connectivity between different client devices and cloud servers. Typically, there is a dedicated server for each individual application or workload.

As a rule cloud computing relies heavily on virtualization and automation technologies. Virtualization enables the easy abstraction and provisioning of services and underlying cloud systems into logical entities that users can request and utilize. Automation and accompanying orchestration capabilities provide users with a high degree of self-service to provision resources, connect services and deploy workloads without direct intervention from the cloud provider's IT staff.

Having a lot of positive aspects in the use of cloud services, it is worth noting certain shortcomings when working with them. Not the most pleasant fact for the user is the news that all his data, placed in a "cloud" are in almost free access for law enforcement agencies at various levels (on request, and no one should inform you about the data request), and also software developers of the service. That is, if you want to know as much as possible about you information, including personal correspondence or photo / video files stored in the cloud, anyone who has shown interest in this will be able to have certain powers.

So, concluding that cloud technology is a modern update in technology, it is the fastest growing and fastest earning technology that makes life easier for every user. The Internet or the cloud connects us through a networked branching system that makes our lives comfortable and makes you feel safe and secure.

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