

WHAT IS CLOUD TECHNOLOGY?

Sadritdinova D.A., graduate student of Navoi State Pedagogical Institute

Annotation. In this article, the work of scientists related to the concept of cloud technology is presented and its possibilities are highlighted based on analytical data.

Key words: cloud, internet, server, resource, Microsoft, virtualization, model, messenger, virtual server, service.

Today, cloud technologies play an important role in effectively organizing the educational process and improving the independent learning process of students. Therefore, it is necessary to introduce cloud technologies into the educational and training process of higher educational institutions. For this, it is necessary to analyze the work of scientists in the field.

In this regard, scientists such as E. Nazirova [1], Z. Khodzhimuratova [2], M. Dzhuraev [3] have conducted research. In their works, the concepts of cloud technologies are interpreted differently.

In particular, according to E. Nazirova, cloud technologies are data processing technologies that provide Internet users with computer resources as an Internet service. According to him, the word "Cloud" means a metaphor representing a complex infrastructure that hides all technical details [1]. Z. Khodzhimuratova said that "Cloud technology" is not only a place to store files, but also a platform with wide possibilities. For example, from the business sector, it offers opportunities to develop and test software applications in the "cloud environment", as well as to apply machine learning technologies. Although cloud technologies were initially used by mature companies in the field of information technology (IT), they later began to be used in other areas for jobs that require powerful computing resources and for storing and processing information. Now there are "cloud storage" (like Dropbox), "cloud servers" (paid but reliable) and "cloud services (service)", and many applications use "cloud services". Examples of these are Instagram, Facebook, messengers, e-mail services, Google online applications in the field of online education, Zoom conferences, LMS systems, Smart-learning technologies, as well as web applications that offer taxi, food ordering services. [2]. M. Dzhuraev said that cloud technologies are a model that presents information technologies to the consumer as a special service through the Internet. The importance of "virtualization" technologies in the emergence of cloud computing is very great [3].

If we look at the history of cloud technologies, it was first created in the 1960s by R. Licklider. Based on the theories of R. Licklider, in 2006, Microsoft launched the Windows version "Microsoft virtual PC". In 2006, the Amazon company created "Amazon Elastic Compute Cloud" by expanding virtual servers on its own devices, and one of the main reasons for this was the emergence of cloud technologies by renting virtual servers to other devices (consumers) [4].

The main part of cloud technologies is cloud computing. Cloud computing is a data processing technology in which computer resources and capabilities are provided to the user as an Internet service. In this, the user has access to his data, but does not control it, and does not have to worry about the infrastructure, operating system and software he is running. The term "cloud" is used as a metaphor based on the image of the internet in a computer network diagram, or as a representation of a complex infrastructure where all the technical details are hidden. According to an IEEE document published in 2008, "Cloud computing is a paradigm in which information is stored permanently on Internet servers and temporarily by the client. For example, on personal computers, game consoles, laptops, smartphones, etc. The most important feature for cloud technologies is the uneven demand of Internet resources by users. To eliminate

this unevenness, another intermediate layer is used - server virtualization. Thus, tasks are distributed between virtual servers and computers [5].

In conclusion, it can be noted that cloud technologies allow quick, convenient, efficient use of a system (servers, applications, storage systems and services), provided without extra effort, conveniently and clearly, only through the provider. is a modern system that anyone can use the data stored in the cloud when connected to the network. For this, the user's computer, tablet, mobile phone must be connected to the Internet.

Foydalanilgan adabiyotlar

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