



## ENSURING THE SECURITY OF CLOUD TECHNOLOGY

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**Annotation:** *We can securely store our files or data using cloud technology. We can pull the information we need from the site where we store our cloud technology data when we need it. With the help of the infrastructure of "cloud" technologies, the possibility of using large computing capacities without excessive costs arises at any place and time. The achievements of modern science provide ample opportunities for the creation of an open "cloud" technology ecosystem.*

**Base words:** *cloud, advantages, disadvantages, cloud, cloud computing, cloud technology, security, private cloud, public cloud, hybrid cloud, Dropbox, Web technology, google docs, method, information, education, environment.*

### INTRODUCTION

The role of software in the rapidly developing era of Information Technology has a great importance in the very current. The Internet has been modernized and server equipment developed. At the same time, there is such an idea that when using the program, it is necessary to combine the accounting systems and use them as a single source. Since 2008 year (Cloud technology) the question of cloud technology has spread widely around the world. Cloud technology-this model shows the client information technology (it) as a service through the internet. Although at first glance "cloud technologies" seem incomprehensible: this model allows fast, convenient, efficient use of something in itself from one system (servers, applications, storage systems and services). Without excessive attempts, it is provided quickly and accurately only through the provider must be connected to the network. Anyone who has access to the data stored in the cloud should only have a computer, tablet, mobile phone connected to the internet[1.6].

Advantages:

1. Consumers do not look at the characteristics of processing power from computers. For computers to run at high power, it is not necessary that they have a large amount of memory and multi-volume disks.
2. The efficiency of using IT infrastructure increases and the number of outputs decreases. If we take an average load assessment of the server for the company, it is 13%.



3. The convenience of working as a group of consumers. In cloud computing systems, multiple users can work at the same time.

4. Availability of access to files on cloud accounts. If the data is being stored in the cloud, users can use this information at any time, only when the Internet network is available.

5. Malumotlarni tolerance to loss. The data that is stored in the cloud places their copies on multiple servers.

Disadvantages: (must be constantly in contact with the Internet network. Every time you use cloud computing technologies, the network must be connected to the Internet. (While programs run slowly and do not have full functional capabilities.

Several applications can run slower on cloud systems than on a local computer system. ( The presence of risk to data security. A xar data security put on cloud technologies by consumers can be compromised. But bunda ranks muxim to trust the consumer to the provider in the first issue.

If the cloud technology provider can reliably encrypt the data exchange, back it up, and have a decent experience in the cloud technology storage market, then problems with security will not arise. As a fact, it can be said that it is not possible to recover data lost in the cloud.

Protection technology. The cloud protection strategy in the IT industry is very high and at the same time it has the highest standards of personal data protection. Cloud computing always makes it possible to determine the requirements for a structural level of xar, setting the occupants area. The possibility of implementing such requirements is currently being taken measures. Attention should be on the use of reliable distribution and operation software. Ilya Trifalenkov, director of the R - Style Center for Information Security – exactly the level of prikladnoy software provides access to information. Only this prikladnoy software level stands on the front line of maximum risk. The main demand in the field of protection tools and cloud computing is focused on this: reducing the cost of security, reducing the requirements for resources, increasing production and taking advantage of the opportunities that will allow the development - insists Denis Bezkorov, co – founder of CSA (Cloud Security Alliance) and vice president of RISSPA (Russian Information Security Professional Association). As an example, in ensuring the security of ualoulalization, tools at the level of hypervisor (virtual machine - the parallel operation of several systems at the same time on the same main computer) against viruses, attacks and threats are used. So security approaches are applied to the current of the network career. Network monitoring, detection of attack and detection of risks, protection from attacks – is carried out by means of hardware installed on the network boundary in the use of such traditional issues. Virt when servicing the localization system, we recommend two different solutions for those cases where it is necessary to ensure the security of traffic between virtual machines belonging to the administrators.



The first solution is based on the fact that when receiving a standard hardware supply, the virtualization must separate the corresponding traffic from the motor itself, transferring it through this device and wrapping it up in the case of a return. The standard solution for this can be used traffic filtering. But such an approach is no less effective. The second solution is based on the fact that issues (solutions) can be placed at the hypervisor level. Such a solution functions by checking communications between virtual machines and analyzing traffic from attacks that occur at the hypervisor level. Therefore, in the commercial market, new products that are produced for the muxualization medium begin to appear. No doubt they will work very efficiently and have the most demanding ease of management[2.15].

In conclusion, we can say that we can safely store our files or data using cloud technology. We can pull the information we need from the site where we store our cloud technology data when we need it. Cloud technology sites entering the top-10 Talic around the world: Google Drive, Dropbox, Mega, Yandex, Disk, iCloud Drive, pCloud, iDrive, OpenDrive, Box.net aDrive, cloud technology there are also cloud technology sites in Uzbekistan: Idata.uz, dump.uz, uzdisk.uz, filebox.uz, filecloud.uz you know what? "UZBEKTELECOM" JSC is launching a cloud data center UZCLOUD. This project is supported by the decree of the president of the Republic of Uzbekistan dated June 27, 2013 № pp-1989 "on measures for further development of the National Information and communication system of the Republic of Uzbekistan" and decree of the president of the Republic of Uzbekistan for 2015.

It was carried out in accordance with the resolution № PP-2313 of 6 March "on the program of modernization and development of road transport infrastructure and engineering communications in 2015-2019 years". The current configuration of the Data center will offer the possibility of expanding the number of servers up to 160 petabytes in the future with a capacity of 1 petabytes of data storage server, up to 10 petabytes. The main services of the data processing and storage center were provided: (Cloud computing-cloud computing; (Colocation-equipment deployment; (VDI-virtualishstoli; VPS-virtual server.

Additional services of the data processing and storage center include: (videoconference communication; ( data reservation; ( telecommunication infrastructure; (development of national content; (web hosting. With the help of the infrastructure of " cloud " technologies, the possibility of using large computing capacities without excessive costs arises at any place and time. The achievements of modern science provide ample opportunities for the creation of an open "cloud" technology ecosystem[5.14].

Conclusion: The main interrelated components of an information-learning environment based on cloud technologies are education, assessment, communications. One of the opportunities for practical implementation of an information-learning environment that allows us to harmonize the traditional tools and techniques of teaching is the set of tools provided by Google[6.12].



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