

IMPORTANT ASPECTS OF CLOUD TECHNOLOGY

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Abstract: *This article provides information on the application of cloud technologies and its content, as well as its important aspects. There are ideas on the basics of efficient use of information resources using cloud technologies. Cloud services, on the other hand, are said to be a technology that can prove to be a service that can be used at any time.*

Keywords: *Software as a service, Platform as a Service, Infrastructure as a Service, Cloud computing, Cloud security, Google applications, Cloud backup, virtual software, computer systems, mobile devices.*

ВАЖНЫЕ АСПЕКТЫ ОБЛАЧНЫХ ТЕХНОЛОГИЙ

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Аннотация: *В этой статье представлена информация о применении облачных технологий и их содержании, а также о его важных аспектах. Есть идеи по основам эффективного использования информационных ресурсов с помощью облачных технологий. С другой стороны, облачные сервисы считаются технологией, которая может оказаться сервисом, который можно использовать в любое время.*

Ключевые слова: *программное обеспечение как услуга, платформа как услуга, инфраструктура как услуга, облачные вычисления, безопасность облака, приложения Google, резервное копирование в облаке, виртуальное программное обеспечение, компьютерные системы, мобильные устройства.*

Today, cloud computing technology is becoming one of the most important technologies. The abundance of innovations often prevents organizations from anticipating market changes and taking advantage of IT opportunities. Cloud trends can be observed every day and it can definitely affect your business. The importance

of cloud computing is an important factor in industrial enterprises and their industries. Their protection and preservation have a special place.

Cloud computing can be understood as a model that serves to provide universal and convenient network access to a common ocean of computing resources that can be configured. With minimal management effort, it is quickly provided, removed, and satisfies the need to interact with the provider[1].

Here's an example of how to use and understand cloud computing. We used to learn to store information only in permanent memory, but now it's not. We now have special software for accessing emails that we can use on the site. We do not use intermediaries and can use a browser. Effective use of the Internet contributes to the development of technology. In remote information exchange, this technology is of great benefit to businesses by providing a web services infrastructure.

Organizations that make the most of cloud technology are moving ahead of the rest. The reason is research on improving the dynamics of business processes using the advantages of technology.

Observations show that cloud computing will be useful in the future and demand is likely to increase. Well-known companies are also moving IT technology to the cloud infrastructure. It has several trends.

Dependence of cloud computing on mobile devices

With the use of the 21st century, mobile technology has a special place in the business world. However, the possibilities are much higher. Cloud services are part of it that can be used at any time. With the help of phones and tablets in all areas, you can effectively use cloud services, store and process remote data.

Cloud and security

Information corruption, theft, and data loss are among the most pressing problems and are a serious threat even to classic IT infrastructures. However, as many organizations move to cloud platforms, we can see that service providers need secure IT support to securely store customer data.

Cloud security is far from the only important trend in cloud computing, but it has aspects that are important to every organization. In addition, there is a great need for

information security services cloud service providers to ensure that data processing methods meet specific requirements and comply with other mandatory regulations.

Overcome obstacles with the help of the cloud

By simplifying data access and providing seamless connectivity, the cloud is effective both between different departments or individuals, both externally. For example, it is also convenient for overcoming business barriers between customer service staff. Once these barriers are removed, enterprises will get rid of the factors that slow down their development and rise.

In the second half of 2020, companies had to take into account a number of cloud computing trends to ensure business continuity. Today, the cloud has become important: it is clear that technology is recognized by organizations and analysts as an important force behind the radical transformation of the entire IT industry.

There are three models for cloud computing services:

1. Software as a service (SaaS, Software as a Service). Responsible for providing cloud-based software provider applications to the consumer. The memory that provides access to the entire suite of software, for which you will definitely have to pay a large monthly fee.

2. Platform as a Service (PaaS, Platform as a Service). The consumer is provided with tools to install applications created or purchased by the consumer in a cloud infrastructure developed using provider-supported tools and programming languages. In addition to using the available resources, you will also have to pay for access to special software for data processing.

3. Infrastructure as a Service (IaaS, Infrastructure as a Service). The consumer is provided with data processing, storage, networking, and other basic computing resources where the consumer can arbitrarily deploy and execute software, including operating systems and applications. The user is only required to pay for access to the server^[2].

The benefits of using cloud technology include:

Availability. Anyone with a computer, tablet, or any mobile device connected to the Internet can access data stored in the cloud. This leads to the following advantages.

Mobility. There is no permanent attachment of the user to a single workplace. Managers can report from anywhere in the world, and managers can track production.

Profitability. Cost reduction is one of the important advantages. The user does not need to buy expensive computers and software that is large in terms of computing power, and he also gets rid of the need to hire a specialist to support local IT technologies.

Rent. The user receives the required set of services only when he needs it and actually pays only for the number of features purchased.

Flexibility. All required resources are provided automatically by the provider.

High production capacity. Large computing power at the user's disposal that can be used to store, analyze and process data.

Reliability. Some experts point out that the reliability of modern cloud computing is much higher than the reliability of local resources, with several businesses being able to purchase and service a complete data center[3].

Google's apps for business emphasize the same benefits, adding that the company protects the environment using cloud computing, explaining that app services are powered by Google's low-capacity data centers.

This "cloud" has a few flaws that you need to be aware of and take note of:

- Access is not possible without the Internet, and if it is not, then it will be possible to work only with documents downloaded to the computer. It should be noted that the Internet should be fast and high quality.
- The cloud service can run more slowly when transferring larger amounts of data than an installed application.
- Security rarely, but in most cases, Cloud backs up, so no need to worry.
- Many people are embarrassed that you have to pay to provide a range of services, but this is a business project where people have to make money.

Despite all the positive reviews, there is also criticism of cloud technology.

The main criticism is that when using virtual software, the data automatically falls into the hands of the developer of that software. Richard Stallman, founder of the

Free Software Movement, says so. The problem of data integration with other providers, both internal enterprise and cloud services, was highlighted.

Experts point to the problem of uncontrolled data: the data left by the user is stored for years without his knowledge, or can not change any part of it. For example, in Google services, a user cannot delete services that he or she has not used, or even individual data groups.

Nevertheless, many experts believe that the advantages of this technology outweigh its disadvantages.

In this article, we've looked at the key concepts that allow for better navigation in the world of cloud technologies, as well as broken down most of the services that are provided based on them. We hope you find this information useful.

Many modern computer and mobile device users cannot imagine life without the Internet, which is firmly entrenched in our daily lives. Relatively recently, new cloud technologies have emerged that are radically different from the classic models of computer systems, although at some points they work on similar principles. However, even though the concept of "cloud" is familiar to many, it still remains unclear.

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