**Abstract**

of attestation master's degree work

subject:

“Cloud and Grid Technologies”

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## Relevance of the work

Today around us is developing a new world of information - a world that allows us to interact and conduct business faster than ever before. In this world where the Internet can connect almost any person and a lot of devices, we are seeing explosive growth in the number of technical and information resources and networked objects, making a significant impact on our everyday lives.

Information has become the main asset of most businesses and companies. Market should be the team to be flexible, able to cooperate and respond quickly to changing conditions. This leads to increased interest in next generation business services over the Internet using so-called. "Cloud computing" or "cloud" services. "

Focus on the opportunities provided by the user - another important aspect of cloud computing, like causing some difficulties and advantages. "Cloudy" model provides users with access to necessary resources in any place and at any time. In assessing the prospects of cloud computing, sometimes perceive a threat from them to the traditional model of personal computing. The advent of cloud computing really should spawn a new class of applied problems, before missing the limited resources of local area or not as widespread as it could be in the future.

Today Grid technology is used for solving scientific, mathematical tasks, which require significant computing resources. Grid computing also mastered for commercial purposes. For example, use them to run some labor-intensive tasks related to economic forecasting, seysmoanalizom, development and study of properties of new drugs.

Indeed, the grid and the clouds have many similarities in architecture and technology used in them. However, cloud computing model is now regarded as more promising due to much more flexible platform for working with remote computing resources.

**Purpose of the work**

The objective is to study cloud technologies, trends and prospects in the future transition to the virtualization of grid resources cluster network to network virtual servers cloudy

**Tasks that are solved in the work**

Next tasks are solved in the work:

1. Studies of fundamental principles and basic elements of cloud technology.

2. Studies of approaches to the use of clouds.

3. Studies of security, privacy, data storage users and how they connect to the cloud.

4. Review of fundamental principles of Grid technologies.

5. Identifying trends in these technologies and their future development.

**Achieved results**

In the issue next results were achieved:

• analysis of the basic principles of the basic elements of cloud technologies;

• description of the features of security, privacy, data storage users and how they connect to the clouds;

• analysis of existing types of cloud technologies;

• description of the basic principles of the Grid;

• research developments;

• identification of future direction grid and cloud technologies;

**Scientific novelty**

• analyzed and some general principles of grid computing and cloud technologies;

• analyzes the main advantages and disadvantages of existing services and cloud computing;

• based on the analysis identified possible ways of further development of these technologies.

**Practical value**

The practical value of the work is that:

• analysis for technology results can be used for further study and enhanced data systems, the trend line resource and technology;

**Conclusions and recommendations**

1. Analyzes the basic principles of the basic elements of cloud technologies;

2. Described and analyzed the basic types of cloud technologies;

3. The analysis of the security, privacy, data storage users and how they connect to the clouds;

4. Disassembled basics of Grid technology;

5. Conclusions concerning the possible further development of grid technology and cloud.

The work contains 89 p.. 18 fig., 1 tab., 17 sources.

Keywords: CLOUD COMPUTING, SERVICES, SOFTWARE, GRID, THE CUSTOMER ISP.