# Abstract

master's degree attestation work

on a theme:

“Analysis of software for peer-based Grid architecture BOINC”

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**The purpose of work**

The purpose of the given work is the formulation of recommendations to select one-level grid-system for use in corporate network depending on the given tasks b resources, also formulation of recommendations about use of BOINC system in a corporate network.

**Urgency of spent researches**

Relevance of the topic of this work is the connected with the fact that today considerable quantity of companies need high computation capacity for processing their own computing projects, but have no possibility to buy or rent the necessary equipment. The alternative decision of this problem is usage of one-level grid systems, that give the opportunity to connect available recourses of the company for organization of necessary calculations

**Tasks solved in work**

1. Review and analysis of existing decisions from the point of view of usage in Intranet and Internet networks;

2. Review and analysis of spheres of use one-level grid-systems from the points of view of their architect models, models of planning of tasks and types of solved problems;

3. Formulation of recommendations for selecting the software for one-level grid for use in corporate networks depending on its possibilities and requirements;

4. Review of use software for BOINC in a corporate network from the point of view of installation and support, preparation of tasks and processing of results.

**The achieved results**

Result of the given work is the carried out analysis of modern grid-systems, their architectural possibilities and a complex of executed tasks. There is formulated a list of recommendations for selecting systems for a corporate network and also use software for BOINC on the basis of a network of chair of SD for the solving of statistical tasks..

**Scientific novelty**

- Review and analysis of spheres of use of single-level Grid-systems from the point of view of their architectural models, models of planning of tasks and types of untied problems;
- The comparative characteristic of the existing software of single-level Grid by the allocated criteria was made;
- Recommendations about use of BOINC system in the Intranet networks from the point of view of installation, support, preparation of tasks and processing of results on an example of a segment of a corporate network of chair SD were created.

**The practical value**

Practical value of the given work consists in a formulation of recommendations fof selecting one-level grid-systems for a corporate network depending on its possibilities and requirements, and also the recommendation about ose of BOINC system in networks of the enterprises in the course of training.

**Conclusions and recommendations**

In the paper has been justified urgency of the topic and had achieved the main goal, namely, a number of recommendations for selecting one-level grid-system for usage in a corporate network depending on tasks in view and available resources, and also a formulation of recommendations about use of BOINC system in a corporate network was made.

*Work on 85 pages contains 14 illustrations. By preparation of work the literature from 20 resources were used.*

Keywords:

*one-level grid, the comparative characteristic, GRID, BOINC, distributed calculations.*