

ABSTRACT

master's degree attestation work

on a theme:

“Research of possibility of realization graphical user interface for middleware ARC in Ukrainian national Grid”

Andrew Shukailo

Actuality of work

The goal of a Grid is to eliminate geographical and organizational boundaries and integrate distributed resources so that these resources are available to all users. But currently, interacting with Grid services can be a tiring and complex process. Furthermore, many of Grid services use CLI, and the processing is performed in batch mode. Although this is functional, it appears from the user's point of view the same as computing model used for supercomputing since the 1950s.

That is why for easing the adoption of Grid technologies by the scientific community, development of graphical user interface for interacting with Grid Services and application is actual, which in conditions of Ukrainian National Grid will allow extending of users audience. It will accelerate their entering in Grid technology for solving scientific and other goals.

The purpose of work

The aim is to study of existent graphical user interfaces for Grid. Study their abilities and properties. Determination of necessary properties of GUI for middleware ARC in Ukrainian National Grid. Search of ways to create of it and argumentation of means of implementation of this graphical interface. Statement of the problem of implementation of GUI for middleware ARC in Ukrainian National Grid.

The problems solved in the paper:

1. Research existent GUI for Grid resources access.
2. Comparison of their properties.
3. Choose and basing of tools for implementation of GUI for middleware ARC in Ukrainian National Grid.
4. Statement of problem of creation of such an interface.

The results achieved

Solving the problem posed in the paper, the author defends:

1. Conclusions regarding the comparison of existent GUI for middleware.
2. Conclusions regarding choose of tools for implementation of GUI for middleware ARC in Ukrainian National Grid.
3. Possible scenarios for the unification of the investigated technologies.
4. Demands, set for creation of this interface

The scientific novelty of the work

The scientific novelty of the work lies in the fact that:

1. Considered and substantiated possibilities of implementation of GUI for middleware ARC in Ukrainian National Grid.
2. Set demands for creation of this interface

The practical value of work

The practical value of this work is that choose of tools for creation of GUI for middleware ARC in Ukrainian National Grid is substantiated and task for its implementation is set.

Findings

- Study for existent GUI for Grid access.
- Study of possibilities of implementation of GUI for middleware ARC.
- Choose of tools for GUI implementation.
- Set task for GUI implementation.

The work contains 105p., 25 fig., 33 sources.

Keywords: GRID, GUI, MIDDLEWARE, ARC.