

ABSTRACT

Explanatory note size – 109 pages, contains 7 illustrations, 34 tables, 2 applications, 4 sections, 28 sources.

Topicality. Business companies and the education organization are constantly developing due to changes in the vector of work or the introduction of new laws. The use of software to automate processes and support new initiatives is becoming a necessity for the effective functioning of modern organizations and institutions. Due to constant digitization and changes in the way of interaction, the implementation of new systems and programs is becoming critical to ensure successful operation and response to market needs. With the development of any organization, the number of systems increases and there is a need to organize proper interaction and data synchronization.

The purpose of the study is reducing of time for the administration of the company's resources due to the implementation of the directory directory.

The following **tasks** were defined for the realization of the goal:

- to analyze approaches to organizing system interaction;
- to develop a catalog of university structures;
- to develop a directory of users;
- to develop a system of distribution of rights and accesses to systems in order to preserve the integrity and security of the system;
- to implement monitoring and logging to track user actions in the system;
- implement the possibility of returning to previous system states.

The object of research is the process of developing a directory catalog

The subject of research is methods of effective data organization using a directories catalog

The novelty of work is received further development using of integration methods of complex systems in terms of support systems and planning of the educational process, which provides opportunities for rapid adaptation to changes in the regulatory framework

Relationship with working with scientific programs, plans, topics.

Work was performed at the Department of Informatics and Software Engineering of the National Technical University of Ukraine «Kyiv Polytechnic Institute. Igor Sikorsky».

The practical value is proposing transition from the interaction of systems based on the principle of a fully connected graph to an architecture with a central control unit. A prototype of the central system "Yadra" was developed with the implementation of catalogs for the structure of the university and users, a rights and access system was developed.

Approbation. The scientific provisions of the dissertation were tested at the Fifth All-Ukrainian Scientific and Practical Conference of Young Scientists and Students "Software Engineering and Advanced Information Technologies"

Publications. The scientific provisions of the dissertation were published in:

Dzividzinska M.I. Software for the implementation of directory catalog / M.I. Dzividzinska, O.D. Finogenov // Materials of the V All-Ukrainian scientific and practical conference of young scientists and students "Software engineering and advanced information technologies" .

Key words. DIRECTORY CATALOG, AUTOMATED SYSTEM, RIGHTS AND ACCESS SYSTEM, INTEGRATION, DATA SYNCHRONIZATION.