The task of information system services integration

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Abstract. *The urgency of solving the task of information system services integration is grounded. Rapid development of the market entails the need for each enterprise to be able to adapt the information system to changes in business processes. For successful integration of information system services on the level of business processes it is necessary to perform integration on the data level. The use of data integration systems is relevant to the integration of databases. The advantage of integration of information system at the data level is the low cost of integration.*

Keywords: *database, integration, information system, reengineering, service, functionality*

I. Introduction and Problem statement

At present, enterprises face the problem of integrating information system services, which are in different sources. The rapid development of the market entails the merger and consolidation of enterprises, which subsequently leads to the fact that the information system existing in the enterprise needs to be adjusted and adjusted to these changes. There is a need to quickly get access to integrated services of all organizations that are part of the enterprise. Thus, the approach to services unification by means of information system's data integration systems application is relevant [1]. There are a number of problems [2], which the developer of integration solutions faces, which can lead to information loss or significant losses, due to re-engineering of processes in the integration of key business processes of the company.

The issues of incompatibility of solutions of information system services integration tasks from different manufacturers were considered in [3]. The authors noted that process management solutions from one vendor do not interact with solutions from another, incompatibility of the presentation and format used by the vendors can hinder the interaction. They also noted that ISO 15746 standard can facilitate the task of integrating information system services. Based on the standard, they modeled the main components of the system using tools from different manufacturers, implemented information models and integrated the key functions of the system.

II. Problem solution and Results

There is a task "Formation and maintenance of an individual plan of a teacher". To solve this problem, a single database was created, which includes information about all types of teacher's work (academic work, scientific work, methodical work, organizational and educational work, as well as a list of positions and long-term assignments) and the load of the teacher.

There is a conceptual idea to create for each type of teacher's work, which is described in the individual plan of the teacher, a separate service - a micro-database, which will cover the functionality of this work. Thus, each section of the individual plan will represent a separate service of the information system. The resulting micro-databases should be integrated into a single database of the information system. At this level of integration, applications are configured to work with a single database. When using a single database for the information system services integration tasks, problems of data duplication or complexity of their extraction from hierarchical structures arise [4].

The obtained solution of an information system services integration task is to be compared in terms of adequacy with a database, which was obtained when solving the task "Formation and maintenance of an individual plan of a teacher".

III. Conclusions

The task of information system services integration at the moment is urgent, because the rapid market development leads to changes in information systems at enterprises. Development and maintenance of a fully integrated system is very expensive. The main problem of such systems is that when changing business processes at the enterprise it will be necessary to completely rebuild the system to meet the necessary requirements. The advantages of integration at the data level are low integration costs [5].

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