

INFORMATION SYSTEM FOR ENSURING THE SECURITY OF ENTERPRISES

Annotation. The paper considers the automated information system, as well as its composition and the relationship of its constituent elements. The functional part and the part of providing the automated information system are investigated. Requirements for the implementation of the functional part of the automated information system are determined. Subsystems of the supporting part of the automated information system are allocated. The peculiarities of designing an automated information system in the conditions where in the process of its creation rational methods of solving managerial problems and data processing technology should be interconnected are studied.

Анотація. В роботі розглянута автоматизована інформаційна система, а також її склад та взаємозв'язок складових елементів. Досліджено функціональну частину та частину забезпечення автоматизованої інформаційної системи. Визначено вимоги до реалізації функціональної частини автоматизованої інформаційної системи. Виділено підсистеми забезпечувальної частини автоматизованої інформаційної системи. Досліджено особливості проектування автоматизованої інформаційної системи в умовах, де у процесі її створення повинні бути взаємопов'язані раціональні методи рішення управлінських задач і технологія оброблення даних.

Аннотация. В работе рассмотрены автоматизированная информационная система, а также ее состав и взаимосвязь составляющих элементов. Исследованы функциональная часть и часть обеспечения автоматизированной информационной системы. Определены требования к реализации функциональной части автоматизированной информационной системы. Выделены подсистемы обеспечительной части автоматизированной информационной системы.

Исследованы особенности проектирования автоматизированной информационной системы в условиях, где в процессе создания должны быть взаимосвязаны рациональные методы решения управленческих задач и технология обработки данных.

Introduction. Automated information system (AIS), like any other complex system, consists of individual elements and the organization of relations between them. In the automated information system there is a functional part and part of the software. The functional part of the AIS is dominant. It is always related to problem areas and is actually a model of the management system of a particular object. The functional part includes those elements that determine its functionality, namely: purpose, management functions performed and information processing functions. The main elements of the functional part of the automated information system are: functional subsystems, blocks, or sets of tasks and individual tasks [1,2].

Main part. Visibility and rigor of structural and object-oriented means analysis allow developers and future users of the system itself began to informally participate in its creation, discuss and consolidate understanding of basic technical solutions. However, the widespread use of these methods and following their recommendations in the development of specific IP was restrained lack of adequate tools, because when non-automated (manual) development, all their benefits are virtually nil.

To implement the functional part of the automated information system requires appropriate resources, which are created by the support part. As part of the security part of the AIS there are separate security subsystems, each of which combines a certain type of resources, as well as the conditions of their organization. These subsystems cover a typical set of resources required for the operation of AIS, so their list is almost the same for different AIS [2, 3]. The main factors influencing the implementation of information systems are the needs of organizations and users, as well as the availability of appropriate tools for their formation. Advances in the field of computer technology and telecommunication networks have had the most significant impact on the development of information systems [1, 3].

Note that the main feature of AIS development is the concentration of complexity at the stages of pre-project survey and design and the relatively low complexity and complexity

of subsequent stages. Considering the design of AIS, it should be noted that modern information technology is implemented in the designed automated information systems, where in the process of their creation should be interconnected rational methods of solving management problems and data processing technology. The design of automated information technology involves the following aspects: technological - as a hardware and communication complex that has a specific configuration and serves for processing and transmission of information, software and mathematics - as a set of mathematical, infographic, statistical, algorithmic and other machine models, and computer methodological programs - as a set of means of implementing management functions, organizational - as a description of the flow of documents of the management staff, post-operational - as a set of technological, logical and arithmetic operations implemented automatically.

Difficult to design and graphically represent rigorous formal system specifications, check them for completeness and consistency and the more to change. If you still manage to create a strict system of design documents, its processing in the event of major changes in practice unfeasible. Manual development usually caused the following problems: inadequate specification of requirements, inability to detect errors in design solutions, low quality documentation, which reduces operational characteristics, long cycle and unsatisfactory test results.

At the present level, the features of scientific and technological progress in the field of security services are the rapid growth and updating of scientific and technical information and the rapid introduction of scientific developments in the maintenance and repair of security systems at the enterprise. Every year the flow of scientific information increases significantly, engineering solutions change rapidly. New materials, equipment, technologies, complex methods of safety systems, new forms of labor organization are introduced during installation and repair.

Conclusions. These problems have created a need for software and technology special class tools - CASE-tools that implement CASE technology for creating and maintaining IP software. CASE-technology is a set of IP design methods, as well as a set tools that allow you to visually model subject area, analyze this model at all stages of development and

maintenance IS, and develop applications according to the information needs of users. The development of an automated information system for the maintenance of enterprise security systems is very useful for establishing a relationship between the customer and the company providing these services, through visual and visual perception of technology, materials, prices and aesthetic preferences.

Sources

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