

PRINCIPLES OF CONSTRUCTION OF INFORMATION SECURITY SYSTEMS

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ABSTRACT

The security of Information Systems is the important direction in the field of Computer Science. In Kazakhstan were 3 International Conference on Security Information and Protection Information Systems in 2013 year, 2014 and 2015 year in Astana.

KEYWORDS: Principles of Construction of Information Security Systems

INTRODUCTION

Information security system includes all the components of the information infrastructure described in this project, and ensures the confidentiality, integrity and availability of information. Information security system ensures safe operation of the business processes, and does not interfere with the work of users with information resources.

Information security system is based on the international standard for information security ISO 17799 ("The rules and regulations while ensuring the security of information"). The ISO 17799 provides general recommendations on the organization of information security, providing a basic level of security of information systems, typical for most organizations.

This standard describes the issues that must be considered when designing the system of information security, and imposes no restrictions on the use of specific means to ensure the security infrastructure components. The ISO 17799 contains the following sections describing the various aspects of security of information systems:

- information security strategy - describes the need to have the support of senior management by adopting a strategy of information security;
- Organizational issues - makes recommendations on the form of the organization, for the optimum implementation of information security systems;
- The classification of information resources - describes the necessary steps to ensure the security of information resources and data carriers;
- Human Resource Management - describes the influence of the human factor on information security and measures aimed at reducing the risk involved;
- physical security - describes measures to ensure the physical safety of the components of the information infrastructure;
- Administration of information systems - describes the main aspects of safety at work with servers, workstations,

and other information systems;

- Access control - describes the need for a clear division of rights and responsibilities when dealing with information;
- Development and maintenance of information systems - describes the basic mechanisms to ensure the security of information systems;
- Business Continuity - describes measures to ensure the continuous operation of the organizations;
- Ensuring compliance with the requirements - describes the general requirements for information security systems and measures for verifying

compliance with information security systems to these requirements

The choice of measures and means of information security is based on analysis of the risks to the components of the information infrastructure. The criteria for information security are confidentiality, integrity and availability of its information resources. The loss of any of the above qualities of the information must be regarded as a breach of information security.

Risk analysis and structure of violations of information security Information security system provides for the protection of information infrastructure components of the security risks of IT resources and related IT services. Information security system is an integrated set of administrative measures and the software and hardware to ensure the safety of information resources. To implement information security system is an important component part of the administrative system, which includes:

- the process of information security included in the system of administration and provides control over the functioning of the system of information security (see. Section SA of the project);
- information security policy, which defines the basic provisions and the scope of information security systems;
- Use the security policy information services which define the specific security requirements of information security infrastructure components;
- procedures to ensure security policies that describe the means and measures for implementation of the requirements of security policies and monitoring their implementation (developed on the stage of the information security system).
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Policies and procedures for information security protect the information infrastructure of the IT risks by implementing appropriate countermeasures.

An integral part of the information security system is a system for ensuring continuity of the business, which includes issues related to recovery and business continuity.

TRIALS GARTNER IN THE FIELD OF NETWORK INFRASTRUCTURE

At the time of an application SPECTRUM Security Manager president Aprisma Management Technologies Skyubits Mike (Mike Skubisz) spoke about this in an open letter that was published in a study by Gartner, and dedicated issues of information protection (<http://www.gartner.com/webletter/aprisma/index.html>). President of Aprisma described the new product as innovative solution, which is an extension of architecture SPECTRUM Service Level Intelligence™ provides intelligent information infrastructure.

BUILDING A VIRTUAL TEAM

Temporary employees were selected on the basis of the importance of their role in the enterprise business and the impact of security breaches. Units with the security groups met the primary resource, because their staff has a wide range of technical skills that are associated with security. The concept of a virtual team prevailed, because part-time employees CIRT and their backups were located party in American cities. To assist partners in participating in this virtual group between the group responsible for the coordination and security architecture the rest of the agreements were concluded.

