

# ESSAY

**Theme of the final qualifying work:** Creation of a corporate network of Zheleznovodsk city hospital.

**Author of the FQW:** Simanovich Alexandr Olegovich.

**Scientific adviser of the FQW:** candidate of technical sciences, associate professor of the department of information and communication technologies, mathematics and information security E.A. Pisarenko.

**Information on the contracting authority:** The city hospital is located at: Zheleznovodsk, 5 Chapaeva St. The organization provides medical services..

**Relevance of the research topic:** is related to the need to increase the productivity of the hospital staff, ensure the connection of all workstations to the server, provide joint access for working with documents, spreadsheets, video recordings, audio recordings.

**Purpose:** to create a project of the corporate network of Zheleznovodsk city hospital.

**Tasks:**

1. Describe the activities of the organization.
2. Analyze information processes and information technology of the organization.
3. Review existing developments and justify the choice of software and hardware.
4. Design the enterprise corporate network.
5. Describe and evaluate the effectiveness of the project.

**The theoretical and practical significance** of the research is that the theory of the principles of constructing local computer networks, topologies and methods for organizing local networks, as well as the development and creation of a corporate network for the Zheleznovodsk city hospital were analyzed. This development of the corporate network can also be used to create a network of other medical institutions.

Results of the study: during the work, the problem of the lack of a corporate network in the Zheleznovodsk city hospital was identified. Information and technical support of the organization was studied.

**The results of the research:** during the work, the problem of the lack of a corporate network in the Zheleznovodsk city hospital was identified. Information and technical support of the organization was studied. Having considered the existing developments in the market of corporate computer networks, the leading developments in the technical and technological design of corporate networks were selected. On the basis of analysis, it is advisable to use logical-star-topology for the corporate network of the State Health Care Institution "Zheleznovodskaya City Hospital", which provides centralized management, storage and use of data, D-Link switches, Fast Ethernet connection technology. In the course of the project, a corporate network was designed, cable management plans, layout of switching cabinets, server layouts.

**Recommendations:** connect all the computers of the organization to the server, allocate separate rooms on the first and third floors for the server and switching cabinets, use switches with a number of ports of at least 24 pcs.