

Thesis on the topic: "Information security setup using technologies of the new Bluetooth Mesh standard on the example of its application in IoT platforms for smart home systems, for DENS LLC, Kislovodsk"

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Details on the organisation: DENS LLC, Kislovodsk.

The relevance of the topic of final qualifying work is that the emergence of the Internet of Things contributes to an increase in the number of devices using an Internet connection, therefore, the number of potentially vulnerable devices for malicious attacks increases. A hacker, if necessary, can purchase any device from the Internet of things and analyze it in order to identify security vulnerabilities, since IoT devices are more susceptible to unauthorized access, unlike conventional servers or devices that have a specialized protection system.

Objective: to increase the level of convenience of security systems management using Bluetooth-mesh technology on IoT (Internet of Things) platforms and the level of security of the organization's local wireless networks

Tasks:

- Examination of existing and emerging standards for the security of wireless networks;
- building a wireless LAN for an organization;
- development of methods and measures to ensure the security of the organization's wireless LAN.

Theoretical and practical significance of the research. The theoretical significance of the final qualifying work is to analyze the standards of Bluetooth wireless technology and Wi-Fi. The practical significance is to improve the protection methods of the DENS organization's wireless technology with the help of modern security standards.

Results: a scheme of setting up a wireless local area network for the organization has been built and methods for protecting the organization's wireless networks have been developed.

Recommendations:

1. Set up wireless local area network based on constructed scheme.
2. Apply earlier reviewed security methods to the organization's wireless networks.