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MODERN MODELS OF ACCESS AND SECURITY OF TERMINAL STATIONS IN INDUSTRIAL COMPUTER NETWORKS

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Modern industrial networks require constant improvement in the field of automation and optimization of information collection, processing and transmission processes. One of the promising directions in this field is the introduction of the "Thin Client" technology, which is gaining more and more importance not only in office environments, but also in production networks [1].

The purpose of the study is to analyze approaches to building access models to ensure reliable security of terminal stations in industrial computer networks. This will make it possible to determine effective methods of access control that take into account the specific requirements of industrial environments, protect critical data and ensure the stability of network components in difficult operating conditions.

To ensure the information security of a complex system, it is important to implement centralized administration of information protection tools. However, in the context of industrial networks, this is complicated by the fact that centralization is possible only if the security administrator manages security at all levels of the system hierarchy. This is an extremely time-consuming task that is not always practically feasible.

Therefore, to control access to terminal stations in industrial networks, it is advisable to apply the following method of centralized administration: the security administrator, making settings at the basic level of the platform, creates reference copies of the settings of protection mechanisms [2]. These reference copies are stored in a special block that analyzes the current settings of access control mechanisms. In the process of system operation, a synchronous analysis of the current settings takes place at certain intervals by comparing them with the reference ones. When deviations are detected, the current settings are automatically restored from the reference copies, which prevents their unauthorized change.

References

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