

ABSTRACT

With the growing of need for information technology, the role of data center in lives become vital, especially as a component the achievement of objectives of the company. Data center should provide optimal service as the center of business service in the company especially in terms of security.

Pusat Dokumentasi dan Informasi Ilmiah (PDII-LIPI) is one of the largest information service provider in Indonesia has implemented a data center to support its business process. But there are problems that arise from weaknesses related to the implementation of data center planning in PDII-LIPI. The problems such as lack of security for the data center room, logical data center security services is still minimal, and the lack of data center security against fire. Based on these, it's needed a physical and logical security design of the data center in accordance with the standards TIA-942 for physical security and ISO/IEC 27000 series for logical security and using PPDIIO Network Life-cycle Approach methods with result the ideal design of data center security for PDII-LIPI.

The test results suggest CCTV monitoring, access control using fingerprint, and preventive and clean-agents fire extinguishers for physical security. For logical security data center proposed information security policies, procedures for operating system update, and implementation of the communications security technology. The test results in this study resulted the ideal design of data center security both physically and logically in PDII-LIPI.

Keywords: Data center, physical and logical security data center, TIA-942, ISO/IEC 27000 series, PPDIIO Network Life-Cycle Approach