ABSTRACT

Telkom Univeristy is the result of a merger of four institutions which is Institut Teknologi Telkom (IT Telkom), Institut Manajemen Telkom (IM Telkom), Politeknik Telkom, and Sekolah Tinggi Seni Rupa dan Desain Indonesia Telkom (STISI Telkom). The continuity of business processes is a necessary condition for an organization to achieve its objectives. University is an institution that can not be separated from the use of information Techonology (IT). Data center is important component in ensuring the sustainability of IT. At the current state, each of institution has a data center respectively.

Based on strategic plan of the future, data center will be combined into a single data center located in Telkom Engineering School (TESC) which was a change of IT Telkom. Therefore needed a new data center design which is a merger of each data center from every institution. In this design using Network Development Life Cycle (NDLC) in the first three stages:analysis, design, and prototyping. The use of method NDLC is matching with data center development in Telkom University and have an adventages in that cycle stage form, so it can accommodate continuous improvement.

The goal of this research is generating new data center design that match the standards and achieve the level on the tier-2 with reference to the TIA-942 as the standart for data center design. The end result is a floor plan of the new location with support area, with the design of electrical systems, cooling systems, cable tray flow, the use of raised floor, and layout of the room.

Key Word : data center, network, server, NDLC, TIA-942