

ABSTRACT

In the increasing growth and utilization of information technology in this era, make a firm must be able to quickly adapt to using information technology in their business development. One of them is data center which is the very important major proponent components, because to support the optimal business process of a firm, data center is required to provide optimal service as well.

Pemerintah Kabupaten Bandung is one of the government structural agency that manages all the needs of people in Bandung regency, West Java Province. Based on the long term plan of DISKOMINFO Pemerintah Kabupaten Bandung period 2016-2020, there will be a development of a server room into a data center. Therefore it's necessary to design a data center related to building facilities and layout. The design includes room needs, rack layout system, and wiring system as a basis to assist in doing development which refers to TIA-942 Standard. In the designing of building facilities and data center layout, PPDIIO network life-cycle approach method is used with three stages as follows: prepare, plan, and design. This method is suitable in terms of initial design the infrastructure, it has a cycle at it's stages, and there is an optimizing stage for long-term development.

The final result of this reseacrh is the building facilities and data center layout plan for DISKOMINFO Pemerintah Kabupaten Bandung includes room needs, rack layout system, wiring system which according to TIA-942 Standard.

Keywords : Data center, TIA-942 Standard, PPDIIO Life-Cycle Approach, Building facilities, data center rooms, rack layout system, cabling system.