## **ABSTRACT**

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PERANCANGAN JARINGAN INTERNET PERPUSTAKAAN DAN LABORATORIUM UNIVERSITAS PEMBANGUNAN JAYA.

Pembangunan Jaya University (UPJ) is a private tertiary institution in the Bintaro area which was founded in 2011 and is supported by the Jaya Development business group. The Jaya Development business group has 17 businesses engaged in property, manufacturing, management consulting, design consulting, contracting, tourism/recreation, trading, mechanical & electrical and education. The Jaya Development business group has more than 50 years of experience in managing the business sector and intends to devote a portion of its main business activities to education in building better quality Indonesian human resources. During the period the practitioner carries out professional work in the UPJ ICT unit, the practitioner is assigned to the Network team section. In the network team, the practitioner is given the task of designing the network. The role of the practitioner as a network designer is to design a network topology at B806-807 Computer Laboratory, B107 Architecture, Civil Engineering Laboratory, Design Laboratory, Library, make RAB (Budget Budget Plan) for tools and materials to be used, configure VLANs on devices internet namely switches and routers, then registering the Ruijie Access Point serial number to Ruijie Cloud, and installing the internet cable line installation. The goal of the practitioner is to design networks in the Library, B806-807 Computer Lab, Architecture Lab, B107, Product Design Lab, and Civil Engineering Lab in these five places to have their own VLAN so that they can have internet access so that lectures can take place smoothly and without a hitch.

Keywords: Internet Network Design, VLAN, Topology.