ABSTRACT

Network infrastructure is a resource consisting of hardware and software used on the network for communication, operations, and network management needs of an organization or company. With network infrastructure in an organization or company can provide communication and service channels and connect internal and external networks or the internet. The Bandung Regency Government (PEMKAB) is a government agency that takes care of all the needs of the community in the Bandung Regency area. Bandung Regency Government is located at Jl. Jl. Raya Soreang Km. 17 Soreang Kab Bandung, West Java. DISKOMINFO is one of the SKPDs in the Bandung District Government which is tasked with building, managing and providing network infrastructure services to the Bandung District Government. At the Bandung Regency Government network infrastructure, Inter-VLAN has now been implemented using a router device with the ROAS method, Inter-VLAN is used to connect each SKPD. There are several SKPD that use more than one switch with different VLAN IDs, these switches are connected to 1 core switch that is used to connect with DISKOMINFO SKPD and the internet. With the number of SKPDs totaling 31 and the presence of more than 1 switch in several SKPDs, overloading the core switches when access is carried out by many switches at the same time. This research produced a blueprint in the form of a proposed network design using the concept of Access Control List (ACL) and Inter-VLAN from connectivity conditions using the Network Development Life Cycle (NDLC) method.

Keyword: Inter-VLAN, Access Control List, Vlan Trunking Protocol, NDLC