

## ***ABSTRACT***

One of the courses that learn about VLANs at the Telkom Institute of Technology Jakarta is Telecommunication Network. In the telecommunication network practicum at the Telkom Institute of Technology Jakarta using a Cisco packet tracer simulator. In the simulator we can design, configure and verify a network architecture such as (VLAN Trunking Protocol) VTP. VTP is important to learn because it relates to VLANs that have a function that can simplify the creation of VLANs on many switches. The purpose of this research is to be a learning media for telecommunications networks in terms of using the EVE-NG simulator. In this study, using the EVE-NG simulator because simulators such as Cisco packet tracer and GNS3 are quite often used, while EVE-NG is rarely even applied to Telecommunication Network practicum learning at the Telkom Institute of Technology Jakarta. Based on the results of this study, it shows that the VTP method is quite effective because it only needs to enter the VLAN on the server switch, then the transparent switch will forward the VLAN from the server switch to the client1 and client2 switches.

**Keywords:** EVE-NG, Telecommunication Network, VLAN, VTP