ABSTRACT

DESIGN AND IMPLEMENTATION
NETWORK MONITORING SYSTEM USING LIBRENMS
IN PT. TEC INDONESIA

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This practical work is done to overcome the problems faced by PT. TEC Indonesia related to the problem of monitoring network devices, because first PT. TEC Indonesia, especially the network administrator, experiences network problems in the form of lack of effectiveness and efficiency of monitoring network devices that are manual, meaning that network administrators must jump into the field directly to monitor. Thus, a monitoring system for network devices in the form of LibreNMS is required using the SNMP Protocol at PT. TEC Indonesia so that it can be controlled centrally.

The planning and implementation stages along with the report writing are carried out for approximately 3 months from mid February 2018 until the end of April 2018 which begins with the determination of the topic, the elaboration of each problem and other interests which are data and information and will be implemented in accordance with the prepared report. The steps are taken to obtain various data and company information through the process of interviews and direct observation to IT Manager.

Based on the results of its implementation, we can understand that by applying a network device monitoring system as a network monitoring tool that is able to track (track) all network devices both from up / down conditions and can find out the physical devices including MAC addresses, IPv4, ARP and FDB tables so they can used as material for the report master list in the company. With this network monitoring system, it can later develop the network administrator's ability to do troubleshooting so that the network within PT. TEC Indonesia tends to be optimal for users and stable for companies.

Keywords: monitoring, network, librenms, device, network administrator.