ABSTRACT

In the context of serving the public, one of the main tasks of the Banten Province Statistics and Encoding Communication Information Service is monitoring and statistical processing of bandwidth usage, analyzing system logs to identify potential network-related problems. The problem is that the default application on the access point used is only 14 days. storage only, then there is no warning in the event of a network disturbance, so that it is known only based on disturbance reports from network users.

In this final project, a monitoring system and statistical data processing of bandwidth usage is carried out which can provide input on the problems of the available internet network. The Final Projects carried out are in the form of: System model topology/internal network structure, Block Diagram of Bandwidth Monitoring System, Testing Scenarios of Monitoring System and Data Processing Statistics of Bandwidth Usage, Installing Network Monitoring System Cacti on XAMPP Windows, and Configuring Cacti.

The results of the function test of the monitoring system design and statistical data processing of bandwidth usage can run according to the plan. The results of this bandwidth monitoring design the system can monitor the bandwidth that is being used and provide alerts and warnings when the bandwidth exceeds the provided bandwidth limit, besides that this monitoring system also can provide alerts and warnings when the network is down; This monitoring system designed, can view bandwidth usage statistics graphs with bandwidth usage intervals per five minutes, can also monitor the bandwidth usage statistics graphs for 1 day to 1 year of storage.

Keywords: Monitoring system, statistical graph, bandwidth.