

ABSTRACT

The increasing use of computer network technology in recent times aims to meet the diverse and rapid information needs. However, the complexity and heterogeneity of networks often lead to challenging problems that are difficult for network administrators to identify and handle, resulting in a fatal decline in network quality. Therefore, it is crucial to implement network management aimed at preserving the network's quality and stability. According to ISO, network management encompasses five conceptual areas: Fault Management, Configuration Management, Accounting Management, Performance Management, and Security Management (FCAPS). One critical aspect of network management is Fault Management, which aims to detect, record, notify users of issues, and rectify problems to keep the network functioning effectively. Research conducted by Muharman Lubis and Fahrurrozi Lubis identifies 13 activities and evaluation parameters in network Fault Management, collectively known as MFAST, to assess the implementation of fault management within companies. Additionally, the Plan-Do-Check-Act (PDCA) approach is utilized to observe processes effectively. The PDCA cycle serves as an efficient management method for continuously improving operational systems. Hence, this study evaluates network Fault Management by employing the PDCA approach and utilizing the 13 MFAST activities and parameters in the context of implementing fault management at PT Telkom Indonesia. The research findings demonstrate that the network's fault management at PT Telkom Indonesia, based on the MFAST framework, has been well-implemented in several aspects. However, there is room for enhancing the efficiency and consistency of network fault management by adopting more structured procedures and conducting activities regularly.

Keywords— network management, computer networks, FCAPS, fault management