

## ABSTRACT

*Big Data is currently an issue that is often discussed in the industry, this is related to the development of information technology that uses Big Data to support the industry, especially in Business Intelligent, Data Analytic, and Machine Learning. Hadoop is a software framework for reliable, scalable, parallel, and distributed computing. Hadoop is used to process, organize and analyze various types of data such as structured, unstructured and semi-structured.*

*With the increasing use of Hadoop as a platform to perform Big Data processing activities, there will be a great need for a secure infrastructure in terms of availability. Before we can determine whether a system is available or not, we need a mechanism to monitor the functional mechanism of the elements in Hadoop itself when carrying out a process.*

*For this reason, with the aim of monitoring the availability of Hadoop, it can be done by implementing a monitoring log from the Hadoop core services itself. With the implementation of log4j monitoring to monitor the daemon log of Hadoop core services, Hadoop can monitor the performance log of the service when Hadoop performs a process and detects the availability of Hadoop elements.*

*Keywords— Hadoop, core services, element, log, availability*