

## **ABSTRACT**

*In the era of Big Data, data is very important for companies, institutions and government. In this era, big data can be applied as a benchmark for business strategy decision making based on information available in big data. In its implementation, big data requires adequate storage space and of course at a cost that is not small. To optimize storage needed a special way in order to minimize costs incurred and be able to optimize the existing server.*

*High availability is a concept that makes a server will still be able to serve traffic even if it has interference on physical and virtual servers. High Availability Server is widely used for various purposes such as online trading services, business and Big Data needs. High Availability Server can be built by using clustering done on the server to increase its availability, one of the ways for clustering that is often used is Kubernetes.*

*Kubernetes is an open source container orchestration. Kubernetes can group containers that form an application that can facilitate the management process. Kubernetes has good flexibility because it can be run for testing on local machines and can also be run as a global enterprise system.*

***Keywords:** High Availability, Big Data, Storage*