

***Implementation of Bandwidth Management On Networking Virtual Local Area Network Linux -based Debian Using Methods Hierarchical Token Bucket ( HTB )***

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***ABSTRACT***

*In today's modern era , internet access problem is not a stranger anymore , everywhere there are already a lot of Internet cafés. Internet usage also varied ranging from email , Web , Gaming , Browsing , Streaming and Multimedia .With the number of internet usage , so it needed a data stream that is good and regular . It required an internet setting by way of bandwidth management . Bandwidth is the large size of the data or information in an internet network . If an internet connection is not in management , resulting in data traffic will be congested and there may be some users can not access the internet . Many methods can be used in the management of bandwidth. However, the author uses the method of Hierarchical Token Bucket ( HTB ) to manage the bandwidth . Most networks in use is the Local Area Network ( LAN ) . Networks that have been commonly used , both in industry and institutions . The author tries to do research that will be applied to the Virtual Local Area Network ( VLAN ) based on Debian Linux . Networks Virtual Local Area Network ( VLAN ) is LAN networks connected to the global network , but can subdivide into multiple virtual networks with one device.*

***Keywords :*** *Bandwidth, Hierarchical Token Bucket (HTB), Virtual Local Area Network (VLAN).*