ABSTRACT

IPFS (InterPlanetary File System) is a file system that uses a peer to peer method in terms of storing and sharing hypermedia in a distributed file system. Because IPFS does not have a minimum requirement, it requires an analysis of the processor system usage to find the minimum requirements on the processor. In its implementation, IPFS will be placed on the virtualization resource model using the Ubuntu operating system. This study refers to the processor usage of files uploaded with different file sizes which are carried out in two conditions: connected with public peers and connected with 2 peers when uploading files. Each of these conditions is carried out with the specifications of single-core and dual-core processors. The process is carried out to determine the effect of processor usage when uploading files on IPFS while connected with public peers and 2 peers by using htop monitoring tools. The average effect of usage processors connected to public peers is greater than when connected with 2 peers. Based on the results above, it can be concluded that the number of peers does have a large influence on the processor usage when running the IPFS virtualization process.

Keywords: IPFS, virtualization, *peer to peer*, *processor usage*, *file uploading*, *public peers*.