**STORAGE**

Lab Report 01

Installing OpenFiler

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| --- | --- |
| Mechanics |  |
| Data Presentation |  |
| Analysis |  |
| Conclusion |  |
| References |  |
| Submission Time |  |
| TOTAL |  |

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| --- | --- |
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**1.** **Introduction**

Our world today is very much dependent on the files and information that we have. Without having access to these, all of us would not be able to function properly. As an example, we have companies or enterprises. Without their files, they would not have anything to work with. In the case of banks, without the account details of their clients, the banks and their branches would not be able to process the transactions of their clients. In the case of telecommunication companies, they will not be able to send out bills to their postpaid subscribers. This will not only halt their services, it will also hinder their revenue from coming in. With this being the case, files and important information should always be at reach. Having copies of them in only one storage device does not suffice the needs of the industry, or users in general, nowadays. Data must be available all the time, 24/7. This is where Openfiler comes in.

Openfiler is a network storage operating system that caters, mostly, to the needs of enterprises [3]. It is a Linux distribution designed for building network attached storage (NAS) system [5]. In short, it acts a central storage. Some of its features include an easy-to-use web based graphical user interface (GUI) that would help users to easily navigate in its features. Other than that, it also runs in a secure shell by default, which provides a more secure connection [1]. Furthermore, it has a powerful block storage virtualization, extensive share management features, quota source allocation, and secured accounts management. [6]

Though Openfiler may sound useful, convenient, and accessible, it still has its drawbacks. First would be that some of its features are not free. Openfiler is an open source tool but some of its features have to be paid for. Second, it does not support 4K Advanced format drives like that of Western Digital Drives. Third, it does not support the ZFS file system. And last, there is no RAID-Z support [2].

Other free web based NAS tools similar to the OpenFiler are FreeNAS and OpenSUSE. FreeNAS offers more features like data encryption, protection and replication. Contrary to what Openfiler offers, FreeNAS has a RAID-Z feature that offers mirroring and either single, double or triple parity protection. These parity protection mentioned are to cover and support its storage capacity in case of disk failures. FreeNAS also has its checksum verification to ensure that there are no uncorrupted data and repairs can be made [4].

All of these tools can be used for data storage in a network. Their goals are to provide network storage, which can be available all the time at no extra cost. This really helps its users not only in saving their money, but also eases the hassle of accessing their important information. This is a huge advancement in technology that makes a huge impact to the society. This creates a ripple of advantageous effects making the society more efficient and more productive.

**2.** **References**

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