ABSTRACT

Data is a collection of information about a thing that can be used as an asset because it can be a source of profit for the business. Data must be maintained and stored in a storage area that called data center. Data center becomes centralized data storage that must work 24 hours so the data center must have a backup in case of unwanted things like viruses, data theft, or disaster. Disaster Recovery Center (DRC) is an alternative data center, when the data center is dead then the DRC will be active and the transfer function occurs. There is a strategy for saving data called Disaster Recovery Strategy (DRS), one example of DRS is to do a remote backup-restore. Remote backup-restore can be done with the help of software. In this research using Bacula software with full backup-restore method. Full backu-restore method used to backup-restore entire file. Goals of this research are to see data integrity and speed of data process after doing backup and restore. The test results show authenticity of data integrity with hash function MD5 and digital signature after the backup and restore process. The speed of the data process is reviewed from value of throughput and delay. Restore has throughput value faster than backup. The delay value in the backup and restore process has an average of under 150 ms, in very good category according to TIPHON version. The remote backup-restore process with Bacula software using the full backup-restore method can support the disaster recovery strategy and the results of data integrity testing and the value of data processing speed can be used as SLA in running DRS with Bacula software.

Keywords: *Disaster Recovery Startegy,* Bacula, *Remote Backup-Restore, Full Backup-Restore, Data Integrity, Speed of Data Process*