ABSTRACT

In the operation of a data center never escapes from various disturbance caused by various factors, such as natural disaster, fire, human error, virus, worm, and fault system. Such conditions may cause anomalies in the business processes that are using the data. Therefore, a disaster recovery strategy (DRS) is required as a strategy to support business continuity, one of which is to perform data backup and data restore activities using a remote backup system in a disaster recovery center. In disaster recovery strategy research using bacula software with differential backup-restore method gets the result that the data integrity of data that has been transmitted during the process of data backup and restore is identical or not disturbed, the integrity of the data is maintained and has fulfilled the information security aspects of the CIA Triad Model and and at the speed of the process with the parameters of throughput on the backup data that gets the increased results, i.e. from 2.337.038 KB/s up to 3237.748 KB/s and the data restore process that gets fluctuated results, i.e. from 9,574,797 KB/s, 10,539,896 KB/s, and 10,493,376 KB/s. While the resulting delay time ranges between 50.145 ms - 50,513 ms on the process of data backup and restore, the results are included in the category very well with the acquisition of index 4 based on TIPHON standards. The results of this study can be a reference in making an SLA related to data integrity and speed of data backup and restore process to support business continuity in a business process.

Keywords: Data Center, DRC, DRS, Bacula, Differential Backup-Restore, CIA Triad Model, TIPHON.