

## **ABSTRACT**

*Data is the information that must be handled and managed properly. The data management uses a data center. To support the data services, the data center must have disaster mitigation by applying Disaster Recovery Strategy (DRS). DRS have to relate with Business Continuity Plan (BCP) to prevent unexpected things for the continuity of the organization's business process. The strategy that has been done to avoid the problems is to perform data backup and restore. Data backup and restore can be done through a computer network by using software remote backup system. The process of data backup and restore uses incremental backup-restore method. A backup system is an important component in many computer system infrastructure and data center as recovery from the data loss and the most important part of a disaster recovery strategy. The research aims to find out how is the influence of data backup process and restore process remotely toward the data integrity and data process speed. The parameter analysis that used to measure the data integrity is hash MD5 checksum and digital signature. While for the parameter of data process speed is throughput and delay time. The result of the research is analysis of data integrity and data process speed before do the data backup process and after process of data restore. The analyze of the data integrity are performed on two parameters, namely hash MD5 and digital signature that have the same integrity result in the data test. While the analysis of data process speed is divided into two, namely throughput and delay time which both of them have the different results due to several factors.*

*Keywords: Disaster Recovery Strategy, Data Center, Data Recovery Center, Backup, Restore, Incremental Backup-Restore.*