Abstract

Acquisition data method on Mobile Device Forensics's activity divided into two method there are Physical and Logical Extraction where each of these method has their own data acquisition technique. On Unrooted Android Device that have limited privilege, Logical Extraction method is used to acquire data on the device. Technique on the Logical Extraction method to acquire the data that existed at the device to be used as a digital evidence include AFLogical, SDcard Imaging, Android Backup Analysis, and use of commercial applications that have been published for mobile device forensics avtivity such as Oxygen-Forensics.

Problem that occur for using Logical Extraction on unrooted android device is on the choosing the right technique for data acquisition for acquiring appropriate data that can be used to be a digital evidence. Because of that problem, it's necessary to analysis of several techniques on Logical Extraction method then do a comparison of a data that can be acquired and how often activities performed on the device to be able to determine the better acquisition technique for this method where that technique can acquire enough data that needed as a digital evidence without damaging the integrity of the evidence itself. With technique comparation on Logical Extraction method for proofing Steam apps communication log on smartphone based on case study, data obtained that Android Backup Analysis technique doing data acquisition on application's data without doing rooting activity or installing application so that make this technique is the best technique that can resolve the case study.

Keyword : *Mobile Device Forensics, Unrooted Android Device, AFLogical, SDcard Imaging, Android Backup Analysis, Oxygen-forensics*