

Catching up faster data in digital crime using mobile devices

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Abstract Mass storage media are becoming increasingly common due to the spread of smartphones to which new technologies are applied. Correspondingly, the amount of data collected from digital crime has considerably increased. Previously, if an investigator did not properly conduct the initial response, valuable evidence would be lost. Thus, collection of digital evidence within a short time frame is required. Further, in searches using data from the smartphones to gather evidence, evidence must be collected and analyzed quickly. Therefore, in this paper, a method is proposed for rapidly collecting data at a crime scene based on the type of criminal charge. Once implemented, our method can collect data by accounting for each feature of the software, providing rapid results through a pattern search. There is also a range of options available with parallel routines. Single or multiple options can be utilized depending on the investigator's requirements.

Keywords Mobile device · Forensic · Evidence collection · Data acquisition

This paper is significantly revised from an earlier version presented at [24, 36].

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