

Performance measurement for mobile forensic data acquisition in Firefox OS

ABSTRACT

Mozilla Corporation has recently released a Linux-based open source operating system, namely Firefox OS. The arrival of this Firefox OS has created new challenges, concentrations and opportunities for digital investigators. Currently, Firefox OS is still not fully supported by most of the existing mobile forensic tools. Even when the phone is detected as Android, only pictures from removable memory was able to be captured. Furthermore, the internal data acquisition is still not working. Therefore, there are very huge opportunities to explore the Firefox OS on every stages of mobile forensic procedures. This paper will present an approach for mobile forensic data acquisition in a forensically sound manner from a Firefox OS running device. This approach will largely use the UNIX dd command to create a forensic image from the Firefox OS running device. Apart from that, performance measurement will be made to find the best block size for acquisition process in Firefox OS.

Keyword: Mobile forensic; Data acquisition; Forensic image; Firefox OS