Advances of mobile forensic procedures in Firefox OS

Abstract

The advancement of smartphone technology has attracted many companies in developing mobile operating system (OS). Mozilla Corporation recently released Linux-based open source mobile OS, named Firefox OS. The emergence of Firefox OS has created new challenges, concentrations and opportunities for digital investigators. In general, Firefox OS is designed to allow smartphones to communicate directly with HTML5 applications using JavaScript and newly introduced WebAPI. However, the used of JavaScript in HTML5 applications and solely no OS restriction might lead to security issues and potential exploits. Therefore, forensic analysis for Firefox OS is urgently needed in order to investigate any criminal intentions. This paper will present an overview and methodology of mobile forensic procedures in forensically sound manner for Firefox OS.

Keyword: Forensic framework; Mobile forensic; Forensic investigation; Forensic methodology; Forensic procedures; Firefox OS