

Digital evidence discovery of networked multimedia smart devices based on
social networking activities

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Abstract

Unquestionably, networked multimedia smart devices are commonly adopted in contemporary ubiquitous wireless computing era with unprecedented evolving pace in terms of mobility, portability, and pervasiveness. Regrettably, those technology-oriented gadgets are phenomenally exploited by cyber criminals or get involved in computer-related incidents unknowingly. Substantively, the detection, prevention, and the related digital forensics of the above scenarios are becoming tremendously urgent both in public and private sectors. Therefore, in this research, we investigate the scenario when state-of-the-art wireless communication technologies are integrated with the networked smart devices where digital evidences may exist and they could be disclosed when appropriate standard operating procedures are suitably applied. Accordingly, in this paper, a PDA with the built-in GPS navigation functionality via the ubiquitous Wi-Fi connection to a popular social networking platform (facebook) is cross examined concerning the related digital evidence collecting and discovering in terms of revealing previous facebook user accounts on the mobile device without shutting off the power. The research provides a generic framework

for the digital
forensics specialists to contemplate when the networked smart devices are
involved in the
related criminal investigation cases especially when omnipresent social
networking platforms
are becoming the new avenue for the escalating, stringent, and heinous
cybercrimes.

Keyword : Digital forensics . Mobile social network . Location-based social
networking . Networked smart devices . Volatile memory acquisition