World Academy of Science, Engineering and Technology
International Journal of Computer and Information Engineering
Vol:8, No:03, 2014

CVOIP-FRU: Comprehensive VoIP Forensics Report Utility

Authors : Alejandro Villegas, Cihan Varol

Abstract : Voice over Internet Protocol (VoIP) products is an emerging technology that can contain forensically important information for a criminal activity. Without having the user name and passwords, this forensically important information can still be gathered by the investigators. Although there are a few VoIP forensic investigative applications available in the literature, most of them are particularly designed to collect evidence from the Skype product. Therefore, in order to assist law enforcement with collecting forensically important information from variety of Betamax VoIP tools, CVOIP-FRU framework is developed. CVOIP-FRU provides a data gathering solution that retrieves usernames, contact lists, as well as call and SMS logs from Betamax VoIP products. It is a scripting utility that searches for data within the registry, logs and the user roaming profiles in Windows and Mac OSX operating systems. Subsequently, it parses the output into readable text and html formats. One superior way of CVOIP-FRU compared to the other applications that due to intelligent data filtering capabilities and cross platform scripting back end of CVOIP-FRU, it is expandable to include other VoIP solutions as well. Overall, this paper reveals the exploratory analysis performed in order to find the key data paths and locations, the development stages of the framework, and the empirical testing and quality assurance of CVOIP-FRU.

Keywords : betamax, digital forensics, report utility, VoIP, VoIPBuster, VoIPWise
Conference Title : ICCEIT 2014 : International Conference on Computer Engineering and Information Technology
Conference Location : Miami, United States
Conference Dates : March 10-11, 2014

Open Science Index, Computer and Information Engineering Vol:8, No:03, 2014 publications.waset.org/abstracts/2689.pdf