



Questioned Documents Section – 2006

J24 Track Down Data on Forged Currencies Using Encase® Computer Forensic Software

Chuan-Hui Chang, MS, Fu-Hsiung Chuang, MS, Hsiang-Feng Hsu, BS, Kuei Liu, BS, So-Lin Yen, MS, and David H. Liu, PhD, Ministry of Justice Investigation Bureau, 74, Chung-Hwa Road, Xindian City, Taipei, 231, Taiwan, ROC*

The goal of this presentation is to improve the accuracy of questioned documents analysis. This presentation will impact the forensic community by demonstrating how EnCase® forensic software could help the examiners to uncover relationships between the questioned documents.

EnCase® forensic software is a powerful and noninvasive investigative tool, and is used by many law enforcement agencies and officials to create a hard drive image of a suspect system. In a previous study, it was found that the combination of DRIFTS, reflectance spectrophotometer, and Py-GC/MS could be used successfully to differentiate paper evidence on questioned documents. Here, the authors identify the origin of the forged currencies which were delivered from different courts by these previously mentioned systematized paper analysis methods. On the other hand, EnCase® was also conducted to scan the entire database from seized computer systems including hard-drives, USB pen drives, floppies, and CDs/DVDs. Although the origin of the forged currencies paper did not come from the same origin, the experimental results demonstrated that the forged currencies processed from examined computer systems was due to all the evidence files that could be extracted, retrieved, and reported completely. In conclusion, the findings indicated that EnCase® forensic software could acquire and analyze the evidence without altering or damaging the origin of the data or scene, and greatly help the examiners to uncover relationships between the questioned documents.

EnCase® Forensic Software, Forged Currencies, Questioned Documents