C23   Computer Forensics Reference Data Sets (CFReDS v2.0) for Digital Evidence

Richard Ayers, MS*, Gaithersburg, MD 20899-8970; Mehdi Shahid, MS*, National Institute of Standards and Technology, Gaithersburg, MD 20899

Learning Overview: After attending this presentation, attendees will better understand the improvements to the CFReDS version 2.0 for digital evidence website. These reference data sets provide the forensic community with documented sets of simulated digital evidence for examination. CFReDS v2.0 is based upon a taxonomy that provides users with the search functionality narrowing hits specific to a dataset of interest. The CFReDS project at the National Institute of Standards and Technology (NIST) will provide users with a portal of datasets produced by the Computer Forensic Tool Testing (CFTT) program and other organizations.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by providing an overview on the functionality of CFReDS v2.0 and the importance of documented sets of simulated digital evidence.

Documented sets of digital evidence allow forensic practitioners, researchers, the general public, and others with the ability to validate software tools, insight to forensic tools' capabilities and limitations as well as training on a specific forensic task. Numerous types of datasets exist within the CFReDS repository, for example, scenario, technology, archived-based data sets that provide users with the ability to gain insight to a digital forensic tools functionality and perform proficiency testing for various types of digital forensic tools.

The new and improved CFReDS leverages a dynamic and ever-evolving taxonomy that includes nodes (or "tags") that can be used by the users to quickly filter out relevant datasets that are usually very information-dense. Using the taxonomy as a building pillar of the application moving forward, CFReDS intends to become a full-fledged search engine in the world of digital forensics and will include test reports and tools, allowing a three-way data correlation and completing the forensics lifecycle.

The goal of CFReDS v2.0 is aimed at providing the forensic community with a centralized repository portal of digital datasets created by numerous worldwide organizations. This centralized portal will provide the forensic community with the ability to quickly find datasets of interest within a centralized website.

The presentation gives an overview of CFReDS v2.0 and the importance of a centralized portal sharing data sets from numerous organizations across the country.

Certain trade names and company products are mentioned in the text or identified. In no case does such identification imply recommendation or endorsement by the author or the author's employer, nor does it imply that the products are necessarily the best available for the purpose.

CFReDS, Digital Data Sets, Digital Forensics