

W01 A Complete Introduction to Digitally Captured Signatures (DCS) and a Tutorial for Namirial's Firma Certa Forensic Analysis Tool

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Learning Overview: The goals of this workshop are to introduce attendees to the new era of DCS, present the legal aspects of the new “digital” documents in reference to traditional pen and paper products, and familiarize attendees with the intricacies of handling such products, both from the hardware and the software aspect. Attendees will acquire the basic knowledge of DCS data and its correspondence to traditional pen and paper signatures and will gain experience using a DCS forensic analysis tool.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by helping attendees understand and familiarize themselves with DCS as a medium. Attendees will know what to look for in a case, how to analyze the DCS, and how to use this highly advanced forensic tool.

DCS are a new technology in the field of Forensic Handwriting Examination. DCS are increasingly used throughout the world, with many countries adopting electronic documents encrypted with DCS biometric data as legally binding documents equivalent to traditionally signed paper documents. Furthermore, for the first time, DCS provide the expert with quantitative insight to features and characteristics of signatures (such as pressure and velocity) that were previously only qualitatively approached. This new technology can help train the expert to more accurate evaluation of dynamic aspects of signature execution on paper through training on hybrid signatures (signatures executed with pen on paper but at the same time captured on a digitizer).

This workshop introduces the new DCS technology to the experts and familiarizes them with the basic aspects and principles of hardware and software issues as well as legal aspects of such biometric documents. The methodology of examining traditional pen and paper signatures is transposed into the new information provided by the DCS technology and introduced to the experts; practical examples will be introduced.

In order to familiarize themselves with the actual handling and analysis of DCS biometric digital documents, attendees will have access to Namirial's Firma Certa Forensic software for DCS and will be trained in the use of its basic features. Specifically, attendees will be taught how to encrypt and decrypt collected samples, visualize the collected data, and apply the different available analysis tools.

Attendees will need to download and install the Firma Certa Forensic software (links will be supplied) on their computer. Access to a compatible digitizer tablet is desirable but not necessary.

DCS, Biometric, Signatures