
Technical Procedure for Computer Forensics Performance Verification

- 1.0 Purpose** – The purpose of this procedure is to ensure that all forensic computers (towers and VMs) involved with casework are in working order and that a standard piece of media was imaged with the expected result.
- 2.0 Scope** - This procedure describes the steps to be taken daily by personnel of the State Crime Laboratory to determine that forensic computers are in proper working order.
- 3.0 Definitions**
 - **Virtual Machine (VM)** – A software emulation of a computer that executes programs like a real machine.
- 4.0 Equipment, Materials and Reagents**
 - Forensic Computer
- 5.0 Procedure**
 - 5.1** The control disk or control thumb drive for the computer shall be imaged each day before any examinations are performed.
 - 5.2** The forensic image shall be examined to ensure that the MD5 hash value for the forensic image matches the known MD5 hash value for the disk. The known MD5 hash value for the disk can be found on the disk's label.
 - 5.3** A notation shall be made in the log within the FA system for the applicable tower/VM. In addition, a notation shall be made in the Forensic Scientist's case notes.
 - 5.4 Standards and Controls** - A control disk or control thumb drive image with a known hash value is used to ensure the proper functioning of forensic computers (towers and VMs) used in casework.
 - 5.5 Calibrations** – N/A
 - 5.6 Maintenance** – N/A
 - 5.7 Sampling** - N/A
 - 5.8 Calculations** - N/A
 - 5.9 Uncertainty of Measurement** - N/A
- 6.0 Limitations**
 - 6.1** The known hash value for the control disk or control thumb drive and the hash value for the forensic image of the control disk or control thumb drive must match. The forensic computer shall not be used for casework until the source of the error in the hash values has been determined and corrected.
 - 6.2** The Computer Forensics Performance Verification Procedure shall be used each day on which analysis is conducted.

7.0 Safety – N/A

8.0 References

- Digital Evidence Validation and Calibration Manual

9.0 Records - N/A

10.0 Attachments - N/A

Revision History		
Effective Date	Version Number	Reason
09/17/2012	1	Original Document
10/31/2013	2	Added issuing authority to header
08/29/2014	3	Added control thumb drive to 5.1, 5.4, and 6.1 Removed sentence regarding 3.5” floppy disk imaged in Windows or DOS from 5.1