

Tuesday, February 26, 2019

Erasure Verification Report

Media ID: 6164911_A1

Level 1 Erasure Verification Result: **Passed**

This document contains the summary and detailed report of the Erasure Verification Services provided by Ontrack to WipeOS.

Ontrack Erasure Verification Services provide an in-depth analysis and verification of customer provided sanitized media. Using advanced laboratory techniques and state-of-the-art proprietary data recovery tools, Ontrack inspects the media to confirm that the target data has been effectively sanitized to the standards of NIST Special Publication 800-88 Rev. 1.

Specific technical and procedural details are included in the remainder of this document.

Ontrack Media Preparation Process

To verify the effectiveness of the sanitization, Ontrack strongly advises preparation by writing two separate unique byte patterns to all logically accessible blocks of the media to simulate user data. This process ensures the entire media, including over provisioned areas, contain identifiable target data. Once prepared, the sanitization process is performed per Microsoft's specifications. If preparation is not possible, Ontrack performs verification to align with the NIST 800-88 r1 standard for Cryptographic Erase as outlined in section 4.7.3. This standard suggests searching the entire media for several strings to verify that no file system structures, operating system files, or common files exist.

Ontrack Verification Process and Levels of Verification

Level 1 Verification analyzes the contents of all sectors which are accessible to the user via the device interface through a Full Verification method as described in the NIST 800-88 r1 document. Ontrack uses proprietary data recovery software tools to perform this verification.

Level 2 HDD Verification analyzes the contents of all sectors that have been remapped by the G-List or hidden in a protected area like HPA/DCO/AMAC.

Level 2 SSD Verification analyzes the media at a raw NAND level. The NAND chips are removed from the controller so that all sectors of each NAND chip can be imaged. The images are then analyzed for any remnants of target data that may exist in any portion of the media including user-accessible portions, but also any bad or defective blocks, spare pool areas, or areas otherwise protected by the controller chip or hidden from the standard interface.

The Ontrack® verification is intended to evidence the independent recognition of a well-known industry leader in Erasure Verification Services for WipeOS. This information is provided on an 'as is' basis. Ontrack and assume no direct, indirect or consequential liability to any third party for the information contained in this report. This report does not constitute a recommendation, endorsement or approval of any kind with respect to any product or service, and should not be relied upon as such under any circumstances.

About Ontrack

Ontrack provides technology-driven services and software to help legal, corporate and government entities as well as consumers manage, recover, search, analyze, and produce data efficiently and cost-effectively. In addition to its award-winning suite of software, Ontrack provides data recovery, data destruction, electronic discovery and document review. For more information about Ontrack and its offerings please visit: www.ontrack.com or follow @Ontrack on Twitter.

Customer Information			
Company name	WipeOS	Service Order Number	6164911
Media Information			
Make / Vendor	WD	Model Number	WD1001FALS
Serial Number	WCATRC402729	Firmware Version	N/A
Media Type	HDD	Media Interface	SATA
Capacity	1TB	LBA	1,953,525,168
Media Preparation			
Tool Used	OverwriteDrive	Revision / Build	V1.00
Pattern Used 1 st Pass	0x55	Pattern Used 2 nd Pass	N/A
Sanitization Details			
Method Type	<input checked="" type="checkbox"/> Clear <input type="checkbox"/> Purge <input type="checkbox"/> Damage <input type="checkbox"/> Destruct		
Method Used	<input type="checkbox"/> Degauss <input checked="" type="checkbox"/> Overwrite <input type="checkbox"/> Block Erase <input type="checkbox"/> Crypto Erase <input type="checkbox"/> Other:		
Tool Vendor	WipeOS	Revision/Build	V2.0
Erasure Verification Details			
Verification Method	Full	Erasure Pattern	0x00
Percent Matching Pattern	100%	Percent Not Matching Pattern	0%
Was HPA/DCO Identified on Device?			N/A
Data Found	<input type="checkbox"/> File System Structures <input type="checkbox"/> Simulated User Data <input checked="" type="checkbox"/> No Data Found <input type="checkbox"/> Other (See engineer comments)		
Engineer Comments			
<p>Level 1 Erasure Verification Result: Passed per NIST 800-88r1 standard</p> <p>WipeOS prepared the media by writing a 0x55 pattern to simulate user data and then executed their sanitization process on the above identified media that was sent in for erasure verification.</p> <p>Upon completion of verification procedures, the drive was found to have 100% of the user accessible sectors filled with the 0x00 erasure pattern. Ontrack has found no simulated user data. No remnants of the 0x55 prep pattern was found on the disk.</p>			