

Paladin 3.0

Test Results for Digital Acquisition Tool *March 18, 2013*



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Test Results for Digital Data Acquisition Tool: Paladin 3.0

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Introduction

The Computer Forensics Tool Testing (CFTT) program is a joint project of the National Institute of Justice (NIJ), the Department of Homeland Security (DHS), and the National Institute of Standards and Technology Law Enforcement Standards Office (OLES) and Information Technology Laboratory (ITL). CFTT is supported by other organizations, including the Federal Bureau of Investigation, the U.S. Department of Defense Cyber Crime Center, U.S. Internal Revenue Service Criminal Investigation Division Electronic Crimes Program, and the U.S. Department of Homeland Security's Bureau of Immigration and Customs Enforcement, U.S. Customs and Border Protection and U.S. Secret Service. The objective of the CFTT program is to provide measurable assurance to practitioners, researchers, and other applicable users that the tools used in computer forensics investigations provide accurate results. Accomplishing this requires the development of specifications and test methods for computer forensics tools and subsequent testing of specific tools against those specifications.

Test results provide the information necessary for developers to improve tools, users to make informed choices, and the legal community and others to understand the tools' capabilities. The CFTT approach to testing computer forensics tools is based on well-recognized methodologies for conformance and quality testing. The specifications and test methods are posted on the CFTT Web site (<u>http://www.cftt.nist.gov/</u>) for review and comment by the computer forensics community.

This document reports the results from testing Paladin 3.0 against the *Digital Data Acquisition Tool Assertions and Test Plan Version 1.0*, available at the CFTT Web site (http://www.cftt.nist.gov/DA-ATP-pc-01.pdf).

Test results from other tools can be found on NIJ's computer forensics tool testing Web page, <u>http://www.ojp.usdoj.gov/nij/topics/technology/electronic-crime/cftt.htm</u>.

How to Read This Report

This report is divided into five sections. The first section is a summary of the results from the test runs. This section is sufficient for most readers to assess the suitability of the tool for the intended use. The remaining sections of the report describe how the tests were conducted, discuss any anomalies that were encountered and provide documentation of test case run details that support the report summary. Section 2 gives justification for the selection of test cases from the set of possible cases defined in the test plan for Digital Data Acquisition tools. The test cases are selected, in general, based on features offered by the tool. Section 3 describes in more depth any anomalies summarized in the first section. Section 4 lists hardware and software used to run the test cases with links to additional information about the items used. Section 5 contains a description of each test case run. The description of each test run lists all test assertions used in the test case, the expected result and the actual result. Please refer to the vendor documentation for guidance on using the tool.

Test Results for Digital Data Acquisition Tool

Tool Tested:	Paladin
Software Version:	3.0
Runtime Environment	Paladin 3.0 CD
Supplier:	Sumuri LLC
Address:	P.O. Box 252 Wyoming, Delaware 19934
Tel:	(302) 570-0015
Email:	sales@sumuri.com
WWW:	http://sumuri.com/

1 Results Summary

Paladin 3.0 is a modified Live Linux distribution designed to simplify the process of creating forensic images in a forensically sound manner. Paladin 3.0 is designed to image, clone and restore data from hard drives and other secondary storage. Except for the following anomalies, the tool acquired the test media completely and accurately.

- Readable sectors that were near faulty sectors on a source drive were not acquired. The tool wrote zeros to the target drive in place of these sectors (DA-09).
- The data written to a target drive became misaligned with the data on the source after faulty sectors were encountered on the source drive (DA-09).
- When a swap partition was acquired to an image file (DA-07-SWAP), seven sectors of the image file differed from the source. The tool wrote zeros for these last seven sectors in place of the appropriate source drive content. This behavior is caused by the Paladin 3.0 execution environment and CFTT has verified that the vendor has fixed this issue in Paladin version 3.0.3.

Refer to sections 3.1 and 3.2 for more details.

2 Test Case Selection

Test cases used to test disk imaging tools are defined in *Digital Data Acquisition Tool Assertions and Test Plan Version 1.0.* To test a tool, test cases are selected from the *Test Plan* document based on the features offered by the tool. Not all test cases or test assertions are appropriate for all tools. There is a core set of base cases (e.g., DA-06 and DA-07) that are executed for every tool tested. Tool features guide the selection of additional test cases. If a given tool implements a feature then the test cases linked to that feature are run. Table 1 lists the testable features of Paladin 3.0 and the linked test cases selected for execution. Table 2 lists the features not available in Paladin 3.0 and the test cases not executed.

Table 1. Selected Test Cases

Supported Optional Feature	Cases selected for execution
Create a clone during acquisition	01
Create an unaligned clone from a digital source	02
Create a truncated clone from a physical device	04
Base Cases	06 & 07
Read error during acquisition	09
Insufficient space for image file	12
Create a clone from an image file	14 & 17
Detect a corrupted (or changed) image file	24 & 25

Table 2. Omitted Test Cases

Unsupported Optional Feature	Cases omitted (not executed)
Create cylinder aligned clones	03, 15, 21 & 23
Device I/O error generator available	05, 11 & 18
Create an image of a drive with hidden sectors	08
Create an image file in more than one format	10
Destination Device Switching	13
Create a clone from a subset of an image file	16
Fill excess sectors on a clone acquisition	19
Fill excess sectors on a clone device	20, 21, 22 & 23
Convert an image file from one format to	26
another	

Some test cases have different forms to accommodate parameters within test assertions. These variations cover the acquisition interface to the source media and the type of digital object acquired. In addition, image file format and image file segment size were varied between test cases.

The following source interfaces were tested: USB, ATA28, ATA48, FW, SATA28, SATA48 and SCSI. These are noted as variations on test cases DA-01 and DA-06.

The following digital source types were tested: partitions (FAT12, FAT16, FAT32, FAT32X, EXFAT, NTFS, EXT2, EXT3, EXT4, SWAP), compact flash (CF) and thumb drive (Thumb). There are two FAT 32 variations testing acquisition of both FAT 32 partition codes 0x0B (FAT32) and 0x0C (FAT32X). These digital source types are noted as variations on test case DA–07.

The following image file types are supported by the tool and were varied in testing: Expert Witness (.E01), raw (.dd) and Apple Disk Image (.dmg).

3 Results by Test Assertion

A test assertion is a verifiable statement about a single condition after an action is performed by the tool under test. A test case usually checks a group of assertions after the

action of a single execution of the tool under test. Test assertions are defined and linked to test cases in *Digital Data Acquisition Tool Assertions and Test Plan Version 1.0.*

Table 3 summarizes the test results for all the test cases by assertion. The column labeled **Assertions Tested** gives the text of each assertion. The column labeled **Tests** gives the number of test cases that use the given assertion. The column labeled **Anomaly** gives the section number in this report where any observed anomalies are discussed.

Assertions Tested	Tests	Anomaly
AM-01 The tool uses access interface SRC-AI to access	31	
the digital source.		
AM-02 The tool acquires digital source DS.	31	
AM-03 The tool executes in execution environment XE.	43	
AM-04 If clone creation is specified, the tool	10	
creates a clone of the digital source.		
AM-05 If image file creation is specified, the tool	21	
creates an image file on file system type FS.		
AM-06 All visible sectors are acquired from the	30	3.1
digital source.		
AM-08 All sectors acquired from the digital source	30	3.1 &
are acquired accurately.		3.2
AM-09 If unresolved errors occur while reading from	1	
the selected digital source, the tool notifies the		
user of the error type and location within the		
digital source.		
AM-10 If unresolved errors occur while reading from	1	
the selected digital source, the tool uses a benign		
fill in the destination object in place of the		
inaccessible data.		
AO-01 If the tool creates an image file, the data	20	
represented by the image file is the same as the data		
acquired by the tool.		
AO-04 If the tool is creating an image file and there	1	
is insufficient space on the image destination device		
to contain the image file, the tool shall notify the		
user.		
AO-05 If the tool creates a multi-file image of a	20	
requested size then all the individual files shall be		
no larger than the requested size.		
AO-06 If the tool performs an image file integrity	1	
check on an image file that has not been changed		
since the file was created, the tool shall notify the		
user that the image file has not been changed.		
AO-07 If the tool performs an image file integrity	1	
check on an image file that has been changed since		
the file was created, the tool shall notify the user		
that the image file has been changed.		
AO-08 If the tool performs an image file integrity	1	
check on an image file that has been changed since		
the file was created, the tool shall notify the user		
of the affected locations.		
AO-11 If requested, a clone is created during an	10	

Table 3. Assertions Tested

Assertions Tested	Tests	Anomaly
acquisition of a digital source.		
AO-12 If requested, a clone is created from an image	10	
file.		
AO-13 A clone is created using access interface DST-	20	
AI to write to the clone device.		
AO-14 If an unaligned clone is created, each sector	19	
written to the clone is accurately written to the		
same disk address on the clone that the sector		
occupied on the digital source.		
AO-17 If requested, any excess sectors on a clone	7	
destination device are not modified.		
AO-19 If there is insufficient space to create a	2	
complete clone, a truncated clone is created using		
all available sectors of the clone device.		
AO-20 If a truncated clone is created, the tool	2	
notifies the user.		
AO-23 If the tool logs any log significant	43	
information, the information is accurately recorded		
in the log file.		
AO-24 If the tool executes in a forensically safe	31	
execution environment, the digital source is		
unchanged by the acquisition process.		

Two test assertions only apply in special circumstances. The assertion AO-22 is checked only for tools that create block hashes. The assertion AO-24 is only checked if the tool is executed in a run time environment that does not modify attached storage devices, such as MS-DOS. In normal operation, an imaging tool is used in conjunction with a write block device to protect the source drive; however, a blocker was not used during the tests so that assertion AO-24 could be checked. Table 4 lists the assertions that were not tested, usually due to the tool not supporting some optional feature, e.g., creation of cylinder-aligned clones.

 Table 4. Assertions not Tested

Assertions not Tested		
AM-07 All hidden sectors are acquired from the digital source.		
AO-02 If an image file format is specified, the tool creates an image		
file in the specified format.		
AO-03 If there is an error while writing the image file, the tool		
notifies the user.		
AO-09 If the tool converts a source image file from one format to a		
target image file in another format, the acquired data represented in		
the target image file is the same as the acquired data in the source		
image file.		
AO-10 If there is insufficient space to contain all files of a multi-		
file image and if destination device switching is supported, the image		
is continued on another device.		
AO-15 If an aligned clone is created, each sector within a contiguous		
span of sectors from the source is accurately written to the same disk		
address on the clone device relative to the start of the span as the		
sector occupied on the original digital source. A span of sectors is		
defined to be either a mountable partition or a contiguous sequence of		

```
Assertions not Tested
sectors not part of a mountable partition. Extended partitions, which
may contain both mountable partitions and unallocated sectors, are not
mountable partitions.
AO-16 If a subset of an image or acquisition is specified, all the
subset is cloned.
AO-18 If requested, a benign fill is written to excess sectors of a
clone.
AO-21 If there is a write error during clone creation, the tool
notifies the user.
AO-22 If requested, the tool calculates block hashes for a specified
block size during an acquisition for each block acquired from the
digital source.
```

The following sections provide detailed information for the anomalies from Table 3.

3.1 Acquisition of Faulty Sectors

In test case DA-09, a source drive with faulty sectors was cloned to a target drive. Readable sectors that were near faulty sectors on the source drive were not acquired. The tool wrote zeros to the target drive in place of these sectors.

The data cloned to the target drive became misaligned after faulty sectors were encountered on the source drive. For example, sector 6,160,448 on the target drive contained the contents of sector 6,160,392 from the source, sector 6,160,449 on the target contained the contents of source sector 6,160,393, and so on. The size of the offset or misalignment between the data on the source and target drives grew as more faulty sectors were encountered on the source.

3.2 Swap Partitions

For test case DA-07-SWAP, where a swap partition was acquired to an image file, the imaging operation completed without an error message. However, the last seven sectors of the image file differed from the source. The tool wrote zeros for these last seven sectors in place of the appropriate source drive content. This behavior is from the Paladin 3.0 execution environment. If a drive is connected at boot time and contains a swap partition, the swap partition is activated and may not be imaged correctly. Active swap partitions can be listed by the command: swapon –s. Any active swap partitions can be deactivated by the command swapoff –a and then imaged correctly. CFTT has verified that the vendor has fixed this issue in version 3.0.3.

4 Testing Environment

The tests were run in the NIST CFTT lab. This section describes the selected test execution environments, computers available for testing, using the support software, and notes on other test hardware.

4.1 Execution Environment

Tests were run from the Paladin 3.0 CD.

4.2 Test Computers

Five computers were used to run the tool: **Deathstar**, **Frank**, **McGarrett**, **Palpatine** and **Scimitar**.

DeathStar, Palpatine and **Scimitar** have the following configuration:

TCP Custom built ULT U12-40670 ULTRA PRODUCTS FULL TOWER ATX 2 ASU P8Z68VPRO/G ASUS P8Z68-V PRO/GEN3 SOCKET 1155 MB INT CORE i5 2500 INTEL CORE I5 2500 3.3GHZ CPU CRU 4GBD3-1333 CRUCIAL 4GB DDR3-1333 8 GIG RAM EVGA 01GP31526K EVGA GT520 1GB PCI-E Dual DVI display card CRU 8400-5000-0 CRU DATAPORT V FRAME SATA TCP SO CRU DATAPORT V IDE, SAM SH-S222AB SAMSUNG 22X SATA DVD RW SII NN830112 SIIG 3 PORT FIREWIRE 800 PCI STA PCIIDE2 STARTECH 2 CHANNEL IDE CONTROLLER PCI IOC SY-PEX40040 I/O CREST 1 + 1 PORT SATA/ESATA III CARD CM EXTREME600W COOLERMASTER EXTREME 600W PS

Frank has the following configuration:

Intel Desktop Motherboard D865GB/D865PERC (with ATA-6 IDE on board controller) BIOS Version BF86510A.86A.0053.P13 Adaptec SCSI BIOS V3.10.0 Intel® Pentium[™] 4 CPU 3.4Ghz 2577972KB RAM SONY DVD RW DRU-530A, ATAPI CD/DVD-ROM drive 1.44 MB floppy drive Two slots for removable IDE hard disk drives Two slots for removable IDE hard disk drives Two slots for removable SATA hard disk drives Two slots for removable SCSI hard disk drives

McGarrett has the following configuration:

Intel® Desktop Motherboard DX48BT2 BIOS Version BTX3810J.86A.1554.2008.0501.1628 Intel® Core[™] 2 Extreme QX9770 CPU 3.20Ghz 4GB DDR3 RAM Diamond Radeon[™] HD3450 PCI-E graphics card SIIG® 3-Port IEEE1395 PCI-E card LG Blu-Ray Super multi drive BD/HD-DVD/DVD/CD Three slots for removable SATA hard disk drives Two slots for removable IDE hard disk drives

4.3 Support Software

A package of programs to support test analysis, FS-TST Release 2.0, was used. The software can be obtained from: <u>http://www.cftt.nist.gov/diskimaging/fs-tst20.zip</u>.

4.4 Test Drive Creation

There are three ways that a hard drive may be used in a tool test case: as a source drive that is imaged by the tool, as a media drive that contains image files created by the tool under test, or as a destination drive on which the tool under test creates a clone of the source drive. In addition to the operating system drive formatting tools, some tools (**diskwipe** and **diskhash**) from the FS-TST package are used to setup test drives.

4.4.1 Source Drive

The setup of most source drives follows the same general procedure, but there are several steps that may be varied depending on the needs of the test case.

- 1. The drive is filled with known data by the **diskwipe** program from FS-TST. The **diskwipe** program writes the sector address to each sector in both C/H/S and LBA format. The remainder of the sector bytes is set to a constant fill value unique for each drive. The fill value is noted in the **diskwipe** tool log file.
- 2. The drive may be formatted with partitions as required for the test case.
- 3. An operating system may optionally be installed.
- 4. A set of reference hashes is created by the FS-TST **diskhash** tool. These include both SHA1 and MD5 hashes. In addition to full drive hashes, hashes of each partition may also be computed.
- 5. If the drive is intended for hidden area tests (DA-08), an HPA, a DCO or both may be created. The **diskhash** tool is then used to calculate reference hashes of just the visible sectors of the drive.

The source drives for DA-09 are created such that there is a consistent set of faulty sectors on the drive. Each of these source drives is initialized with **diskwipe** and then their faulty sectors are activated. For each of these source drives, a duplicate drive, with no faulty sectors, serves as a reference drive for comparison.

4.4.2 Media Drive

To setup a media drive, the drive is formatted with one of the supported file systems. A media drive may be used in several test cases.

4.4.3 Destination Drive

To setup a destination drive, the drive is filled with known data by the **diskwipe** program from FS-TST. Partitions may be created if the test case involves restoring from the image of a logical acquire.

4.5 Test Drive Analysis

For test cases that create a clone of a physical device, e.g., DA-01, DA-04, etc., the destination drive is compared to the source drive with the **diskcmp** program from the FS-TST package; for test cases that create a clone of a logical device, i.e., a partition, e.g.,

DA-02, DA-20, etc., the destination partition is compared to the source partition with the **partcmp** program. For a destination created from an image file, e.g., DA-14, the destination is compared, using either **diskcmp** (for physical device clones) or **partcmp** (for partition clones), to the source that was acquired to create the image file. Both **diskcmp** and **partcmp** note differences between the source and destination. If the destination is larger than the source it is scanned and the excess destination sectors are categorized as either, undisturbed (still containing the fill pattern written by **diskwipe**), zero filled or changed to something else.

For test case DA-09, imaging a drive with known faulty sectors, the program **anabad** is used to compare the faulty sector reference drive to a cloned version of the faulty sector drive.

For test cases such as DA-06 and DA-07 any acquisition hash computed by the tool under test is compared to the reference hash of the source to check that the source is completely and accurately acquired.

4.6 Note on Test Drives

The testing uses several test drives from a variety of vendors. The drives are identified by an external label that consists of a two digit hexadecimal value and an optional tag, e.g., 25-SATA. The combination of hex value and tag serves as a unique identifier for each drive. The two digit hex value is used by the FS-TST **diskwipe** program as a sector fill value. The FS-TST compare tools, **diskcmp** and **partcmp**, count sectors that are filled with the source and destination fill values on a destination that is larger than the original source.

5 Test Results

The main item of interest for interpreting the test results is determining the conformance of the device with the test assertions. Conformance with each assertion tested by a given test case is evaluated by examining the **Log Highlights** box of the test report.

5.1 Test Results Report Key

The following table presents an explanation of each section of the test details in section 5.2. The Tester Name, Test Host, Test Date, Drives, Source Setup and Log Highlights sections for each test case are populated by excerpts taken from the log files produced by the tool under test and the FS-TST tools that were executed in support of test case setup and analysis.

Heading	Description
First Line:	Test case ID, name, and version of tool tested.
Case Summary:	Test case summary from Digital Data Acquisition Tool
	Assertions and Test Plan Version 1.0.
Assertions:	The test assertions applicable to the test case, selected from
	Digital Data Acquisition Tool Assertions and Test Plan
	Version 1.0.

Heading	Description
Tester Name:	Name or initials of person executing test procedure.
Test Host:	Host computer executing the test.
Test Date:	Time and date that test was started.
Drives:	Source drive (the drive acquired), destination drive (if a
	clone is created) and media drive (to contain a created
	image).
Source Setup:	Layout of partitions on the source drive and the expected
	hash of the drive.
Log Highlights:	Information extracted from various log files to illustrate
	conformance or non-conformance to the test assertions.
Results:	Expected and actual results for each assertion tested.
Analysis:	Whether or not the expected results were achieved.

5.2 Test Details

The test results are presented in this section.

5.2.1 DA-01-ATA28

Test Case DA	-01-ATA28 Sumuri Paladin 3.0.0
Case	DA-01 Acquire a physical device using access interface AI to an unaligned
Summary:	clone.
Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-04 If clone creation is specified, the tool creates a clone of the digital source. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-11 If requested, a clone is created during an acquisition of a digital source. AO-13 A clone is created using access interface DST-AI to write to the clone device. AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source. AO-17 If requested, any excess sectors on a clone destination device are not modified. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.
Tester Name:	Csr
Test Host:	Palpatine
Test Date:	Sat Sep 1 13:30:47 2012
Drives:	src(41) dst (02-IDE) other (none)
Source	src hash (SHA256): <
Setup:	FBF3AA21489653D880FFAE71449A9F7E8EE4F56A6C3BF58A3A3FFB13203F1B1D >
Decup	src hash (SHA1): < 15CAA1A307271160D8372668BF8A03FC45A51CC9 >
	src hash (MD5): < 0A68EF78BDC14E2026710D8CCB5607C >
	78125000 total sectors (4000000000 bytes)
	65534/015/63 (max cyl/hd values)
	65535/016/63 (number of cyl/hd)
	IDE disk: Model (WDC WD400BB-75JHC0) serial # (WD-WMAMC4658355)
	N Start LBA Length Start C/H/S End C/H/S boot Partition type

Test Case DA	-01-ATA28 Sumuri Paladin 3.0.0		
	1 P 00000063 078107967 0000/001/01 1023/254/		
	2 P 00000000 0000000 0000/000/00 0000/00/ 3 P 00000000 0000000 0000/000/00 0000/000/	00 00 empty entry	
	3 P 00000000 00000000 0000/000/00 0000/000/	00 00 empty entry	
	4 P 00000000 00000000 0000/000/00 0000/000/	00 00 empty entry	
	1 078107967 sectors 39991279104 bytes		
Log	====== Destination drive setup ======		
Highlights:	78165360 sectors wiped with 2		
	===== Comparison of original to clone drive =	=====	
	Sectors compared: 78125000		
	Sectors match: 78125000 Sectors differ: 0		
	Bytes differ: 0		
	Diffs range		
	Source (78125000) has 40360 fewer sectors than	destination (78165360)	
	Zero fill: 0		
	Src Byte fill (41): 0		
	Dst Byte fill (02): 40360		
	Other fill: 0		
	Other no fill: 0		
	Zero fill range:		
	Src fill range: 78125000 78165250		
	Dst fill range: 78125000-78165359 Other fill range:		
	Other not filled range:		
	0 source read errors, 0 destination read error	S	
		-	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubu	ntu SMP Tue Apr 10 22:19:09	
	UTC 2012 i686 i686 i386 GNU/Linux	-	
	====== Excerpt from Tool log =======		
	Source Drive:		
	Model Number: WDC WD400BB-75JHC0		
	Serial Number: WD-WMAMC4658355		
	Hash values calculated during initial creation	1	
	Total (md5): 0a6a8ef78bdc14e2026710d8ccb5607c	• -	
	Total (sha1): 15caa1a307271160d8372668bf8a03fc	45a51cc9	
	====== End of Excerpt from Tool log ========		
	<pre>===== Source drive rehash ====== Rehash (SHA1) of source: 15CAA1A307271160D8372</pre>	668BF8A03FC45A51CC9	
Results:	Assertion & Expected Result	Actual Result	
	AM-01 Source acquired using interface AI.	as expected	
	AM-01 Source acquired using interface AI. AM-02 Source is type DS.	as expected	
	AM-02 Source is type DS. AM-03 Execution environment is XE.	as expected	
	AM-04 A clone is created.	as expected	
	AM-06 All visible sectors acquired.	as expected	
	AM-08 All sectors accurately acquired.	as expected	
	A0-11 A clone is created during acquisition.	as expected	
	A0-13 Clone created using interface AI.	as expected	
	AO-14 An unaligned clone is created.	as expected	
	A0-17 Excess sectors are unchanged.	as expected	
	A0-22 Tool calculates hashes by block.	option not available	
	AO-23 Logged information is correct.	as expected	
		as expected	
	A0-24 Source is unchanged by acquisition.	ab expected	
	AU-24 Source is unchanged by acquisition.		
Analysis:	Expected results achieved		

5.2.2 DA-01-ATA48

Test Case DA-	01-ATA48 Sumuri Paladin 3.0.0
Case	DA-01 Acquire a physical device using access interface AI to an unaligned
Summary:	clone.
Assertions:	AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-04 If clone creation is specified, the tool creates a clone of the digital source.
	AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-11 If requested, a clone is created during an acquisition of a digital source. AO-13 A clone is created using access interface DST-AI to write to the
	clone device. AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector
	occupied on the digital source. AO-17 If requested, any excess sectors on a clone destination device are not modified.
	AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.
	AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.
Tester Name:	Csr
Test Host:	McGarrett
Test Date:	Sat Sep 1 23:11:52 2012
Drives:	<pre>src(4E) dst (33-IDE) other (none)</pre>
Source	<pre>src hash (SHA1): < 7DDFF1A74B2E2B7E7EE43C41CD9066E27986644D ></pre>
Setup:	<pre>src hash (MD5): < 62C9436930204E0F38921771ACA1BE88 > 488397168 total sectors (250059350016 bytes) 30400/254/63 (max cyl/hd values) 30401/255/63 (number of cyl/hd) IDE disk: Model (WDC WD2500JB-22FUA0) serial # (WD-WMAEP1925256) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 00000063 488375937 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 00000000 00000000 0000/000/00 0000/000/00 00</pre>
Log Highlights:	===== Destination drive setup ===== 488397168 sectors wiped with 33
	<pre>===== Comparison of original to clone drive ===== Sectors compared: 488397168 Sectors match: 488397168 Sectors differ: 0 Bytes differ: 0 Diffs range 0 source read errors, 0 destination read errors</pre>
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux
	====== Excerpt from Tool log ====== Source Drive: Model Number: WDC WD2500JB-22FUA0 Serial Number: WD-WMAEP1925256 =============== Hashes:
	Hash values calculated during initial creation: Total (md5): 62c9436930204e0f38921771aca1bb88 Total (sha1): 7ddff1a74b2e2b7e7ee43c41cd9066e27986644d ======== End of Excerpt from Tool log =======
	===== Source drive rehash ======

Results:		
	Assertion & Expected Result	Actual Result
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-04 A clone is created.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-11 A clone is created during acquisition.	as expected
	A0-13 Clone created using interface AI.	as expected
	AO-14 An unaligned clone is created.	as expected
	A0-17 Excess sectors are unchanged.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	A0-24 Source is unchanged by acquisition.	as expected

5.2.3 DA-01-FW

Test Case DA-	-01-FW Sumuri Paladin 3.0.0
Case	DA-01 Acquire a physical device using access interface AI to an unaligned
Summary:	clone.
Assertions:	AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE.
	AM-04 If clone creation is specified, the tool creates a clone of the digital source.
	AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-11 If requested, a clone is created during an acquisition of a digital source.
	AO-13 A clone is created using access interface DST-AI to write to the clone device.
	AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.
	AO-17 If requested, any excess sectors on a clone destination device are not modified.
	AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.
	AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.
Tester Name:	Csr
Test Host:	Palpatine
Test Date:	Tue Aug 28 07:07:06 2012
Drives:	src(63-FU2) dst (61-FU2) other (none)
Source	src hash (SHA256): <
Setup:	<pre>EC8EF011494BA6DA18F74C47547C3E74E7180585096A830F9247A98EF613BB1D > src hash (SHA1): < F7069EDCBEAC863C88DECED82159F22DA96BE99B > src hash (MD5): < EE217BC4FA4F3D1B4021D29B065AA9EC > 117304992 total sectors (60060155904 bytes) Model (SP0612N) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 004192902 0000/001/01 0260/254/63 Boot 06 Fat16 2 X 004192965 113097600 0261/000/01 1023/254/63 OF extended 3 S 00000063 113097537 0261/001/01 1023/254/63 OB Fat32 4 S 00000000 00000000 0000/000/00 0000/000 00</pre>
Highlights:	117304992 sectors wiped with 61
	Sectors compared: 117304992 Sectors match: 117304992 Sectors differ: 0 Bytes differ: 0 Diffs range 0 source read errors, 0 destination read errors OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09
	UTC 2012 i686 i686 i386 GNU/Linux
	Source Drive: Source Physical device DMI SAMSUNG SP0612N 60GB (/dev/sda) ================= Hashes:
	Hash values calculated during initial creation: Total (md5): ee217bc4fa4f3d1b4021d29b065aa9ec Total (sha1): f7069edcbeac863c88deced82159f22da96be99b

	====== End of Excerpt from Tool log =======	
	<pre>===== Source drive rehash ====== Rehash (SHA1) of source: F7069EDCBEAC863C88DEC</pre>	ED82159F22DA96BE99B
Results:		
	Assertion & Expected Result	Actual Result
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-04 A clone is created.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-11 A clone is created during acquisition.	as expected
	AO-13 Clone created using interface AI.	as expected
	AO-14 An unaligned clone is created.	as expected
	AO-17 Excess sectors are unchanged.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.4 DA-01-SATA28

Test Case DA-	-01-SATA28 Sumuri Paladin 3.0.0
Case	DA-01 Acquire a physical device using access interface AI to an unaligned
Summary:	clone.
Assertions:	AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-04 If clone creation is specified, the tool creates a clone of the digital source. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-11 If requested, a clone is created during an acquisition of a digital source.
	AO-13 A clone is created using access interface DST-AI to write to the clone device.
	AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.
	AO-17 If requested, any excess sectors on a clone destination device are not modified. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is
	accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.
Tester Name:	jrr
Test Host:	Scimitar
Test Date:	Mon Aug 27 15:22:17 2012
Drives:	src(07-SATA) dst (04-SATA) other (none)
Source	src hash (SHA256): <
Setup:	CE65C4A3C3164D3EBAD58D33BB2415D29E260E1F88DC5A131B1C4C9C2945B8A9 > src hash (SHA1): < 655E9BDDB36A3F9C5C4CC8BF32B8C5B41AF9F52E > src hash (MD5): < 2EAF712DAD80F66E30DEA00365B4579B > 156301488 total sectors (80026361856 bytes) Model (WDC WD800JD-32HK) serial # (WD-WMAJ91510044) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 156280257 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 00000000 00000000 0000/000/00 0000/000/00 00
Log Highlights:	===== Destination drive setup ===== 156301488 sectors wiped with 4
	<pre>===== Comparison of original to clone drive ====== Sectors compared: 156301488 Sectors match: 156301488 Sectors match: 156301488 Sectors differ: 0 Bytes differ: 0 Diffs range 0 source read errors, 0 destination read errors OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux ====== Excerpt from Tool log ====== Source Drive:</pre>

	<pre>===== Source drive rehash ====== Rehash (SHA1) of source: 655E9BDDB36A3F9C5C4CC</pre>	8BF32B8C5B41AF9F52E
Results:	Dependence of Temperature Dependence	A should be mult
	Assertion & Expected Result	Actual Result
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-04 A clone is created.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-11 A clone is created during acquisition.	as expected
	AO-13 Clone created using interface AI.	as expected
	AO-14 An unaligned clone is created.	as expected
	AO-17 Excess sectors are unchanged.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected

5.2.5 DA-01-SATA48

Summary:clone.Assertions:AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-04 If clone creation is specified, the tool creates a clone of the digital source. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-11 If requested, a clone is created during an acquisition of a digital source. AO-13 A clone is created using access interface DST-AI to write to the clone device. AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source. AO-17 If requested, any excess sectors on a clone destination device are not modified. AO-22 If requested, the tool calculates block hashes for a specified block		01-SATA48 Sumuri Paladin 3.0.0
Assertions: M=01 The tool uses access interface SRC-A1 to access the digital source. AM=02 The tool acquires digital source DS. N=03 The tool executes in execution environment XE. AM=04 fit clone creation is specified, the tool creates a clone of the digital source. AM=06 A11 sectors acquired from the digital source are acquired accurately. AD=11 fit requested, a clone is created during an acquisition of a digital source. AD=13 A clone is created using access interface DST-A1 to write to the clone device. AD=11 fit numligned clone is created, each acctor written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source. AD=14 if a numligned clone is created using access interface DST-A1 to write to the clone device. AD=11 fit requested, any excess sectors on a clone destination device are not modified. AD=24 if a qualitation for each block acquired from the digital source. AD=24 if requested in the tog file. AD=24 if the tool executes in a formation is courately recorded in the formation is accurately recorded in the formation process. Test Home: irr Test Mame: fir Trest Mame: fir Test Mame: fir	Case	DA-01 Acquire a physical device using access interface AI to an unaligned
A0-17 If requested, any excess sectors on a clone destination device are not modified. A0-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. A0-23 If the tool logs any log significant information, the information is accurately recorded in the log file. A0-24 If the tool exceutes in a forensically safe execution environment, the digital source is unchanged by the acquisition process. Test Date: Tue Aug 28 13:40:02 2012 Drives: src(DD-SATA) det (2C-SATA) other (none) Source src hash (SHA1): < BAAD0802781E55F232E7528CA73BD41D228C1377 > Setup: src hash (SHA1): < BAAD0802781E55F232E7528CA73BD41D228C1377 > Setup: src hash (SHA1): < BAAD0802781E55F232E7528CA73BD41D228C1377 > Setup: src hash (MD5): < 1FA7C3CBE60EB989863BD2041E40C9 > 488397168 total sectors (SC05059350016 bytes) 30401/255/63 (number of cyl/hd) Model (WDC WD2500D-22F) serial # (WD-WMAEH2678216) N N Start LBA Length Start C/H/S End C/H/S Boot D7 NTFS 2 P 00000000 0000000 0000/000/00 0000/000/	Summary:	<pre>clone. AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-04 If clone creation is specified, the tool creates a clone of the digital source. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-11 If requested, a clone is created during an acquisition of a digital source. AO-13 A clone is created using access interface DST-AI to write to the clone device. AO-14 If an unaligned clone is created, each sector written to the clone is</pre>
Test Host:frankTest Date:Tue Aug 28 13:40:02 2012Drives:src(OD-SATA) dst (2C-SATA) other (none)Sourcesrc hash (SHA1): < BAAD60E8781E55728CA73BD41D228C1377 >Setup:src hash (MD5): < IFA7C3CBE60EB9889863DED2411E40C9 >488397168 total sectors (250059350016 bytes)30400/254/63 (number of cyl/hd)Model (WDC WD2500JD-22F) serial # (WD-WMAEH2678216)N Start LBA Length Start C/H/S End C/H/S boot Partition type1 P 00000063 488375937 0000/001/01 1023/254/63 Boot 07 NTFS2 P 00000000 00000000 0000/000/00 0000/000/00 00		AO-17 If requested, any excess sectors on a clone destination device are not modified.AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.AO-24 If the tool executes in a forensically safe execution environment,
Test Date:Tue Aug 28 13:40:02 2012Drives:src(0D-SATA) dst (2C-SATA) other (none)Sourcesrc hash (SHAI): < BAD8028781E55F2E32F528CA73BD41D228C1377 >Setup:src hash (MD5): < IFA7C3CEE60E89E89863DED2411E40C9 >488397168 total sectors (250059350016 bytes)30400/254/63 (max cyl/hd values)30401/255/63 (number of cyl/hd)Model (MDC WD2500/D-22F) serial # (WD-WMAEH2678216)NStart LBA LengthStart LBA LengthStart C/H/S End C/H/SD 00000000 00000000 0000/000/00 00000 empty entry3 P 00000000 00000000 0000/000/00 000/000/	Tester Name:	jrr
Drives:src(OD_SATA) dst (2C-SATA) other (none)Sourcesrc hash (SHA1): < BAAD80E8781E55F223EF528CA73BD41D228C1377 >Setup:src hash (MD5): < 11FA7C3CEE60EB5289863DED2411E40C9 >488397168 total sectors (250059350016 bytes)30400/254/63 (max cyl/hd values)30400/255/63 (number of cyl/hd)Model (WDC WD2500JD-22P) serial # (WD-WMAEH2678216)NStart LBA Length Start C/H/S End C/H/S boot Partition type1 P 000000063 488375937 0000/001/01 1023/254/63 Boot 07 NTFS2 P 00000000 00000000 0000/000/00 0000/000/00 00		
Source src hash (SHA1): < BAAD80E8781E55F2E3EF528CA73BD41D228C1377 > Setup: src hash (MD5): < 1FA7C3CBE60E89E89863DED2411E40C9 > 488397168 total sectors (250059350016 bytes) 30400/254/63 (max cy1/hd values) 30401/255/63 (number of cy1/hd) Model (WDC WD2500JD-22F) serial # (WD-WMAEH2678216) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 00000000 00000000 0000/000/00 0000/000/00 00 empty entry 3 P 00000000 00000000 0000/000/00 0000/000/00 00 empty entry 4 P 00000000 00000000 0000/000/00 0000/000/00 00 empty entry 4 P 00000000 00000000 0000/000/00 0000/000/00 00 empty entry 4 P 00000000 00000000 0000/000/00 0000/000/00 00 empty entry 4 P 00000000 00000000 0000/000/00 0000/000/00 00 empty entry 4 P 00000000 00000000 0000/000/00 0000/000/00 00 empty entry 4 P 00000000 00000000 0000/000/00 0000/000/00 00 empty entry 4 P 00000000 00000000 0000/000/00 0000/000/00 00 empty entry 4 P 00000000 00000000 00 empty entry 4 P 00000000 00000000 00 empty entry 4 P 000000000 00000000000000		
<pre>Setup: src hash (MD5): < 1FA7C3CBE60EB9E89863DED2411E40C9 > 488397168 total sectors (250059350016 bytes) 30401/255/63 (number of cyl/hd) Model (WDC WD2500JD-22F) serial # (WD-WMAEH2678216) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 488375937 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 00000000 00000000 0000/000/00 000 empty entry 3 P 00000000 00000000 0000/000/00 000 empty entry 4 P 00000000 00000000 0000/000/00 000 empty entry 1 488375937 sectors 250048479744 bytes Log Highlights: Log Highlights:</pre>		
<pre>Highlights: 488397168 sectors wiped with 2C ====== Comparison of original to clone drive ====== Sectors compared: 488397168 Sectors match: 488397168 Sectors differ: 0 Bytes differ: 0 Diffs range 0 source read errors, 0 destination read errors OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD2500JD-22FYB0 Serial Number: WD-WMAEH2678216 =========== Hashes: Hash values calculated during initial creation: Total (md5): 1fa7c3cbe60eb9e89863ded2411e40c9 Total (shal): baad80e8781e55f2e3ef528ca73bd41d228c1377</pre>	Setup:	<pre>src hash (MD5): < 1FA7C3CBE60EB9E89863DED2411E40C9 > 488397168 total sectors (250059350016 bytes) 30400/254/63 (max cyl/hd values) 30401/255/63 (number of cyl/hd) Model (WDC WD2500JD-22F) serial # (WD-WMAEH2678216) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 488375937 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 00000000 00000000 0000/000/00 000 empty entry 3 P 00000000 00000000 0000/000/00 000 empty entry 4 P 00000000 00000000 0000/000/00 00 empty entry 1 488375937 sectors 250048479744 bytes</pre>
====== kild of Excerpt from foot fog =======	-	488397168 sectors wiped with 2C ====== Comparison of original to clone drive ===== Sectors compared: 488397168 Sectors match: 488397168 Sectors differ: 0 Bytes differ: 0 Diffs range

Results:		
	Assertion & Expected Result	Actual Result
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-04 A clone is created.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-11 A clone is created during acquisition.	as expected
	AO-13 Clone created using interface AI.	as expected
	AO-14 An unaligned clone is created.	as expected
	AO-17 Excess sectors are unchanged.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected

5.2.6 DA-01-SCSI

Test Case DA-	01-SCSI Sumuri Paladin 3.0.0
Case	DA-01 Acquire a physical device using access interface AI to an unaligned
Summary:	clone.
Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-04 If clone creation is specified, the tool creates a clone of the digital source. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-11 If requested, a clone is created during an acquisition of a digital source. AO-13 A clone is created using access interface DST-AI to write to the clone device. AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source. AO-17 If requested, any excess sectors on a clone destination device are not modified. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment,
	the digital source is unchanged by the acquisition process.
ma at any N	
Tester Name: Test Host:	jrr
Test Host: Test Date:	frank Mon Aug 27 14:45:37 2012
Drives:	mon Aug 27 14.45.37 2012 src(E0) dst (05-SATA) other (none)
Source	src hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7FA6158BECB82 >
Setup:	src hash (MD5): < A97C8F36B7AC9D5233B90AC09284F938 > 17938985 total sectors (9184760320 bytes) Model (ATLAS10K2-TY092J) serial # (169028142436)
Log Highlights:	===== Destination drive setup ===== 156301488 sectors wiped with 5
	<pre> Comparison of original to clone drive Sectors compared: 17938985 Sectors match: 17938985 Sectors differ: 0 Diffs range Source (17938985) has 138362503 fewer sectors than destination (156301488) Zero fill: 0 Dst Byte fill (E0): 0 Dst Byte fill (E0): 0 Dst Byte fill (05): 138362503 Other fill: 0 Cher fill: 0 Ctro fill range: Src fill range: 17938985-156301487 Other fill range: 17938985-156301487 Other fill range: 0 down compared to the fill of the fill range: Other not filled range: 0 source read errors, 0 destination read errors OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux ======= Excerpt from Tool log ======= Source Drive: /dev/sdg: QUANTUM ATLAS10K2-TY092J DDD6 ========= Hashes: Hash values calculated during initial creation: Total (md5): a97c8f36b7ac9d5233b90ac09284f938 Total (shal): 4a6941f1337a8a2b10fc844b4d7fa6158becb82 ======== End of Excerpt from Tool log =======</pre>

	===== Source drive rehash ===== Rehash (SHA1) of source: 4A6941F1337A8A22B10FC	844B4D7FA6158BECB82
Results:	Assertion & Expected Result	Actual Result
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-04 A clone is created.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	A0-11 A clone is created during acquisition.	as expected
	A0-13 Clone created using interface AI.	as expected
	AO-14 An unaligned clone is created.	as expected
	A0-17 Excess sectors are unchanged.	as expected
	A0-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected

5.2.7 DA-01-USB

Test Case DA-	-01-USB Sumuri Paladin 3.0.0
Case	DA-01 Acquire a physical device using access interface AI to an unaligned
Summary:	clone.
Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-04 If clone creation is specified, the tool creates a clone of the digital source. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-11 If requested, a clone is created during an acquisition of a digital source. AO-13 A clone is created using access interface DST-AI to write to the clone device. AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source. AO-17 If requested, any excess sectors on a clone destination device are not modified. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the
Tester	digital source is unchanged by the acquisition process.
Name:	
Test Host:	Palpatine
Test Date:	Mon Aug 27 15:23:15 2012
Drives:	<pre>src(63-FU2) dst (61-FU2) other (none)</pre>
Source	src hash (SHA256): <
Log	<pre>src hash (SHA1): < F7069EDCBEAC863C88DECED82159F22DA96BE99B > src hash (MD5): < EE217BC4FA4F3D1B4021D29B065AA9EC > 117304992 total sectors (60060155904 bytes) Model (SP0612N) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 004192902 0000/001/01 0260/254/63 Boot 06 Fat16 2 X 004192965 113097600 0261/000/01 1023/254/63 OF extended 3 S 00000063 113097537 0261/001/01 1023/254/63 OF extended 3 S 00000000 00000000 0000/000/00 0000/000/00 00</pre>
Log Highlights:	===== Destination drive setup ====== 117304992 sectors wiped with 61 ====== Comparison of original to clone drive ======
	Sectors compared: 117304992 Sectors match: 117304992 Sectors differ: 0 Bytes differ: 0 Diffs range 0 source read errors, 0 destination read errors OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux ======= Excerpt from Tool log ======= Source Drive: Source Physical device SAMSUNG SP0612N 215C1FA1CF 60GB (/dev/sda) ============== Hashes: Hash values calculated during initial creation: Total (md5): ee217bc4fa4f3d1b4021d29b065aa9ec Total (shal): f7069edcbeac863c88deced82159f22da96be99b

	====== End of Excerpt from Tool log =======		
	====== Source drive rehash ======		
	Rehash (SHA1) of source: F7069EDCBEAC863C88DEC	ED82159F22DA96BE99B	
Results:			
	Assertion & Expected Result	Actual Result	
	AM-01 Source acquired using interface AI.	as expected	
	AM-02 Source is type DS.	as expected	
	AM-03 Execution environment is XE.	as expected	
	AM-04 A clone is created.	as expected	
	AM-06 All visible sectors acquired.	as expected	
	AM-08 All sectors accurately acquired.	as expected	
	AO-11 A clone is created during acquisition.	as expected	
	AO-13 Clone created using interface AI.	as expected	
	AO-14 An unaligned clone is created.	as expected	
	AO-17 Excess sectors are unchanged.	as expected	
	AO-22 Tool calculates hashes by block.	option not available	
	AO-23 Logged information is correct.	as expected	
	AO-24 Source is unchanged by acquisition.	as expected	
Analysis:	Expected results achieved		

5.2.8 DA-02-CF

Test Case DA	-02-CF Sumuri Paladin 3.0.0
Case	DA-02 Acquire a digital source of type DS to an unaligned clone.
Summary:	
Summary: Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-04 If clone creation is specified, the tool creates a clone of the digital source. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-11 If requested, a clone is created during an acquisition of a digital source. AO-13 A clone is created using access interface DST-AI to write to the clone device. AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source. AO-17 If requested, any excess sectors on a clone destination device are not modified. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the
Tester	digital source is unchanged by the acquisition process.
Name:	
Test Host:	Palpatine
Test Date:	Tue Aug 28 13:49:05 2012
Drives:	<pre>src(cl-cf) dst (c2-cf) other (none)</pre>
Source Setup:	<pre>src hash (SHA256): < C7CF0218222DF80D5316511D6814266C7FA507C13F795AD3D323BB73C1590D80 > src hash (SHA1): < 5B8235178DF99FA307430C088F81746606638A0B > src hash (MD5): < 776DF8B4D2589E21DEBCF589EDC16D78 > 503808 total sectors (257949696 bytes) Model (</pre>
Log Highlights:	<pre>===== Destination drive setup ====== 503808 sectors wiped with C2 ====== Comparison of original to clone drive ===== Sectors compared: 503808 Sectors match: 503808 Sectors differ: 0 Bytes differ: 0 Diffs range</pre>
	<pre>0 source read errors, 0 destination read errors OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux ======= Excerpt from Tool log ======= Source Drive: Source C1-CF on Physical device Generic CF 0000001 257MB (/dev/sda) ========= Hashes: Hash values calculated during initial creation: Total (md5): 776df8b4d2589e21debcf589edc16d78 Total (shal): 5b8235178df99fa307430c088f81746606638a0b</pre>

Test Case D	A-02-CF Sumuri Paladin 3.0.0		
	Hash values for verification started at 20120828 14:04:04: Total (md5): 776df8b4d2589e21debcf589edc16d78 Total (sha1): 5b8235178df99fa307430c088f81746606638a0b ======== End of Excerpt from Tool log ========		
	Rehash (SHA1) of source: 5B8235178DF99FA307430	C088F81746606638A0B	
Results:			
	Assertion & Expected Result	Actual Result	
	AM-01 Source acquired using interface AI.	as expected	
	AM-02 Source is type DS.	as expected	
	AM-03 Execution environment is XE.	as expected	
	AM-04 A clone is created.	as expected	
	AM-06 All visible sectors acquired.	as expected	
	AM-08 All sectors accurately acquired.	as expected	
	A0-11 A clone is created during acquisition.	as expected	
	AO-13 Clone created using interface AI.	as expected	
	AO-14 An unaligned clone is created.	as expected	
	A0-17 Excess sectors are unchanged.	as expected	
	A0-22 Tool calculates hashes by block.	option not available	
	AO-23 Logged information is correct.	as expected	
	A0-24 Source is unchanged by acquisition.	as expected	
Analysis:	Expected results achieved		

5.2.9 DA-02-THUMB

Test Case DA-	02-THUMB Sumuri Paladin 3.0.0
Case Summary:	DA-02 Acquire a digital source of type DS to an unaligned clone.
Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-04 If clone creation is specified, the tool creates a clone of the digital source. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-11 If requested, a clone is created during an acquisition of a digital source. AO-13 A clone is created using access interface DST-AI to write to the clone device. AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source. AO-17 If requested, any excess sectors on a clone destination device are not modified. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.
	the digital source is unchanged by the acquisition process.
Tester Name:	Csr
Test Host:	Palpatine
Test Date:	Tue Aug 28 14:21:03 2012
Drives:	<pre>src(d5-thumb) dst (d6-thumb) other (none)</pre>
Source	src hash (SHA1): < D68520EF74A336E49DCCF83815B7B08FDC53E38A >
Setup:	<pre>src hash (MD5): < C843593624B2B3B878596D8760B19954 > 505856 total sectors (258998272 bytes) Model (usb2.0Flash Disk) serial # ()</pre>
Log Highlights:	===== Destination drive setup ===== 4001760 sectors wiped with D6
	<pre>====== Comparison of original to clone drive ====== Sectors compared: 505856 Sectors match: 505856 Sectors differ: 0 Diffs range Source (505856) has 3495904 fewer sectors than destination (4001760) Zero fill: 0 Dst Byte fill (D5): 0 Dst Byte fill (D6): 3495904 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Src fill range: Dst fill range: 505856-4001759 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux ======= Excerpt from Tool log ======= Source Physical device CRUCIAL usb2.0Flash Disk 104000000000C0D 258MB (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954</pre>

	====== End of Excerpt from Tool log =======	:
	====== Source drive rehash ====== Rehash (SHA1) of source: D68520EF74A336E49DCCF	83815B7B08FDC53E38A
Results:		
	Assertion & Expected Result	Actual Result
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-04 A clone is created.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-11 A clone is created during acquisition.	as expected
	AO-13 Clone created using interface AI.	as expected
	AO-14 An unaligned clone is created.	as expected
	AO-17 Excess sectors are unchanged.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
		as expected

5.2.10 DA-04

Test Case DA-04 Sumuri Paladin 3.0.0		
Case	DA-04 Acquire a physical device to a truncated clone.	
Summary:		
Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-04 If clone creation is specified, the tool creates a clone of the digital source. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-11 If requested, a clone is created during an acquisition of a digital source. AO-13 A clone is created using access interface DST-AI to write to the clone device. AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source. AO-19 If there is insufficient space to create a complete clone, a truncated clone is created, the tool notifies the user. AO-20 If a truncated clone is created, the tool notifies the user. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. 	
	AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.	
Tester	Jrr	
Name:	Opinitar	
Test Host: Test Date:	Scimitar	
Drives:	Tue Aug 28 13:32:14 2012 src(41) dst (31-IDE) other (none)	
Source	src hash (SHA256): <	
	<pre>src hash (SHA1): < 15CAAlA307271160D8372668BF8A03FC45A51CC9 > src hash (MD5): < 0A6A8EF78BDC14E2026710D8CCB5607C > 78125000 total sectors (4000000000 bytes) 65534/015/63 (max cyl/hd values) 65535/016/63 (number of cyl/hd) IDE disk: Model (WDC WD400BB-75JHC0) serial # (WD-WMAMC4658355) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 078107967 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 00000000 00000000 0000/000/00 0000/000 00</pre>	
Log Highlights:	===== Destination drive setup ===== 35673120 sectors wiped with 31	
	<pre>====== Comparison of original to clone drive ====== Sectors compared: 35673120 Sectors match: 35673120 Sectors differ: 0 Bytes differ: 0 Diffs range Source (78125000) has 42451880 more sectors than destination (35673120) 0 source read errors, 0 destination read errors OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux</pre>	
	======================================	
	Model Number: WDC WD400BB-75JHC0	

	Serial Number: WD-WMAMC4658355		
	========= Hashes:		
	Hash values calculated during initial creation	:	
	====== End of Excerpt from Tool log ========		
	====== Source drive rehash ======		
	668BF8A03FC45A51CC9		
Results:			
Rebuieb	Assertion & Expected Result	Actual Result	
	AM-01 Source acquired using interface AI.	as expected	
	AM-02 Source is type DS.	as expected	
	AM-03 Execution environment is XE.	as expected	
	AM-04 A clone is created.	as expected	
	AM-06 All visible sectors acquired.	as expected	
	AM-08 All sectors accurately acquired.	as expected	
	A0-11 A clone is created during acquisition.	as expected	
	AO-13 Clone created using interface AI.	as expected	
	AO-14 An unaligned clone is created.	as expected	
	AO-19 Truncated clone is created.	as expected	
	AO-20 User notified that clone is truncated.	as expected	
	A0-22 Tool calculates hashes by block.	option not available	
	AO-23 Logged information is correct.	as expected	
	A0-24 Source is unchanged by acquisition.	as expected	
Analysis:	Expected results achieved		

5.2.11 DA-06-ATA28

	D6-ATA28 Sumuri Paladin 3.0.0 DA-06 Acquire a physical device using access interfa	and AT to an image file
Case Summary:	DA-00 Acquire a physical device using access interi-	ace AI to an image Ille.
Assertions:	AM-01 The tool uses access interface SRC-AI to acces	ss the digital source
IIDDCI CIOIID	AM-02 The tool acquires digital source DS.	bb the argitar boarde.
	AM-03 The tool executes in execution environment XE	
	AM-05 If image file creation is specified, the tool	
		creates an image life
	on file system type FS.	
	AM-06 All visible sectors are acquired from the dig	
	AM-08 All sectors acquired from the digital source a	
	AO-01 If the tool creates an image file, the data r	epresented by the image
	file is the same as the data acquired by the tool.	
	AO-05 If the tool creates a multi-file image of a r	
	the individual files shall be no larger than the re-	quested size.
	AO-22 If requested, the tool calculates block hashe	s for a specified block
	size during an acquisition for each block acquired	from the digital source.
	AO-23 If the tool logs any log significant informat.	ion, the information is
	accurately recorded in the log file.	
	AO-24 If the tool executes in a forensically safe es	xecution environment.
	the digital source is unchanged by the acquisition	
		F100000.
Tester Name:	CST	
Test Host:	Palpatine	
Test Date:	Wed Sep 5 12:40:01 2012	
Drives:	<pre>src(12-IDE) dst (none) other (38-SATA)</pre>	
Source	<pre>src hash (SHA1): < 10DC1439E56093FFA6F11E10442106F2</pre>	7D899F67 >
Setup:	<pre>src hash (MD5): < ACAFB6838330FD24221199512A61D565</pre>	>
	234441648 total sectors (120034123776 bytes)	
	14592/254/63 (max cyl/hd values)	
	14593/255/63 (number of cyl/hd)	
	Model (00JB-00REA0) serial # (WD-WCANMD06	05)
Log		
Highlights:	===== Tool Settings: ======	
	image format: E01	
	image size: 2GB	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu S	MP Tue Apr 10 22:19:09
	UTC 2012 i686 i686 i386 GNU/Linux	
	====== Image file segments ======	
	1 1789118590 Sep 5 13:27 da-06-ata28.E01	
	2 3081 Sep 5 13:27 da-06-ata28.log.txt	
	====== Excerpt from Tool log =======	
	Source Drive:	
	Model Number: WDC WD1200JB-00REA0	
	Serial Number: WD-WCANMD060578	
	Serial Number: WD-WCANMD060578 ======== Hashes:	
	Serial Number: WD-WCANMD060578 ========= Hashes: Hash values calculated during initial creation:	
	Serial Number: WD-WCANMD060578 ========= Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565	
	Serial Number: WD-WCANMD060578 ========= Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd	124221199512a61d565
	Serial Number: WD-WCANMD060578 ========= Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHA1 hash calculated over data:	324221199512a61d565
	Serial Number: WD-WCANMD060578 ======== Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHA1 hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67	24221199512a61d565
	Serial Number: WD-WCANMD060578 ========= Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHA1 hash calculated over data:	24221199512a61d565
	Serial Number: WD-WCANMD060578 ========= Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHA1 hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ======= End of Excerpt from Tool log =======	324221199512a61d565
	Serial Number: WD-WCANMD060578 ======== Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHA1 hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ====== End of Excerpt from Tool log ====== ===== Source drive rehash =====	
	Serial Number: WD-WCANMD060578 ========= Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHA1 hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ======= End of Excerpt from Tool log =======	
Results:	Serial Number: WD-WCANMD060578 ======== Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHA1 hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ====== End of Excerpt from Tool log ====== ===== Source drive rehash =====	
Results:	Serial Number: WD-WCANMD060578 ========= Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHA1 hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ====== End of Excerpt from Tool log ======= ===== Source drive rehash ===== Rehash (SHA1) of source: 10Dc1439E56093FFA6F11E1044	
Results:	Serial Number: WD-WCANMD060578 ========= Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHA1 hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ====== End of Excerpt from Tool log ======= Rehash (SHA1) of source: 10Dc1439E56093FFA6F11E1044 Assertion & Expected Result	2106F27D899F67 Actual Result
Results:	Serial Number: WD-WCANMD060578 ======== Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHAl hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ====== End of Excerpt from Tool log ======= Rehash (SHAl) of source: 10Dc1439E56093FFA6F11E1044 Assertion & Expected Result AM-01 Source acquired using interface AI.	2106F27D899F67 Actual Result as expected
Results:	Serial Number: WD-WCANMD060578 ======== Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHA1 hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ====== End of Excerpt from Tool log ======= ===== Source drive rehash ====== Rehash (SHA1) of source: 10Dc1439E56093FFA6F11E1044 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS.	2106F27D899F67 Actual Result as expected as expected
Results:	Serial Number: WD-WCANMD060578 ======== Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHA1 hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: 10DC1439E56093FFA6F11E1044 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE.	Actual Result as expected as expected as expected as expected
Results:	Serial Number: WD-WCANMD060578 ======== Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHAl hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ======= End of Excerpt from Tool log ======= Rehash (SHAl) of source: 10Dc1439E56093FFA6F11E1044 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS.	Actual Result as expected as expected as expected as expected as expected
Results:	Serial Number: WD-WCANMD060578 ======== Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHAl hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ======= End of Excerpt from Tool log ======= ===== Source drive rehash ====== Rehash (SHAl) of source: 10Dc1439E56093FFA6F11E1044 Am-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired.	Actual Result as expected as expected as expected as expected as expected as expected as expected
Results:	Serial Number: WD-WCANMD060578 ======== Hashes: Hash values calculated during initial creation: Total (md5): acafb6838330fd24221199512a61d565 MD5 hash calculated over data: acafb6838330fd SHAl hash calculated over data: 10dc1439e56093ffa6f11e10442106f27d899f67 ======= End of Excerpt from Tool log ======= Rehash (SHAl) of source: 10Dc1439E56093FFA6F11E1044 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS.	Actual Result as expected as expected as expected as expected as expected

Test Case DA-06-ATA28 Sumuri Paladin 3.0.0			
	AO-05 Multifile image created.	as expected	
	AO-22 Tool calculates hashes by block.	option not available	
	AO-23 Logged information is correct.	as expected	
	AO-24 Source is unchanged by acquisition.	as expected	
Analysis:	Expected results achieved		

5.2.12 DA-06-ATA48

Cado	06-ATA48 Sumuri Paladin 3.0.0 DA-06 Acquire a physical device using access interface AI to an image file.	
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.	
-		
Assertions:	AM-01 The tool uses access interface SRC-AI to access the digital source.	
	AM-02 The tool acquires digital source DS.	
	AM-03 The tool executes in execution environment XE.	
	AM-05 If image file creation is specified, the tool creates an image file	
	on file system type FS.	
	AM-06 All visible sectors are acquired from the digital source.	
	AM-08 All sectors acquired from the digital source are acquired accurately.	
	AO-01 If the tool creates an image file, the data represented by the image	
	file is the same as the data acquired by the tool.	
	AO-05 If the tool creates a multi-file image of a requested size then all	
	the individual files shall be no larger than the requested size.	
	AO-22 If requested, the tool calculates block hashes for a specified block	
	size during an acquisition for each block acquired from the digital source.	
	AO-23 If the tool logs any log significant information, the information is	
	accurately recorded in the log file.	
	AO-24 If the tool executes in a forensically safe execution environment,	
	the digital source is unchanged by the acquisition process.	
	the argital bourse is anomalyca by the acquisition process.	
Destan Nemet		
Tester Name: Test Host:	csr Palpatine	
	<u>_</u>	
Test Date:	Wed Sep 5 08:34:01 2012	
Drives:	src(4E) dst (none) other (38-SATA)	
Source	src hash (SHA1): < 7DDFF1A74B2E2B7E7EE43C41CD9066E27986644D >	
Setup:	src hash (MD5): < 62C9436930204E0F38921771ACA1BB88 >	
	488397168 total sectors (250059350016 bytes)	
	30400/254/63 (max cyl/hd values)	
	30401/255/63 (number of cyl/hd)	
	IDE disk: Model (WDC WD2500JB-22FUA0) serial # (WD-WMAEP1925256)	
	N Start LBA Length Start C/H/S End C/H/S boot Partition type	
	1 P 000000063 488375937 0000/001/01 1023/254/63 Boot 07 NTFS	
	2 P 000000000 00000000 0000/000/00 0000/000/00 00	
	3 P 000000000 00000000 0000/000/00 0000/000/00 00	
	1 488375937 sectors 250048479744 bytes	
Log		
Highlights:	===== Tool Settings: =====	
	image size: 2GB	
	-	
	image format: dd	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux	
	UTC 2012 i686 i686 i386 GNU/Linux	
	UTC 2012 i686 i686 i386 GNU/Linux	
	UTC 2012 i686 i686 i386 GNU/Linux ====== Image file segments ====== 1 2097152000 da-06-ata48.001	
	UTC 2012 i686 i686 i386 GNU/Linux ====== Image file segments ====== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002	
	UTC 2012 i686 i686 i386 GNU/Linux ====== Image file segments ====== 1 2097152000 da-06-ata48.001	
	UTC 2012 i686 i686 i386 GNU/Linux ====== Image file segments ====== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002	
	UTC 2012 i686 i686 i386 GNU/Linux ====== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003	
	UTC 2012 i686 i686 i386 GNU/Linux ====== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118	
	UTC 2012 i686 i686 i386 GNU/Linux ====== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003	
	UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.119	
	UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.119 120 498262016 da-06-ata48.120	
	UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ======= Excerpt from Tool log =======	
	UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.119 120 498262016 da-06-ata48.120	
	UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.119 120 498262016 da-06-ata48.120 ======= Excerpt from Tool log ====== Source Drive:	
	UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ====== Excerpt from Tool log ======= Source Drive: Model Number: WDC WD2500JB-22FUA0	
	UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD2500JB-22FUA0 Serial Number: WDC-WDAEP1925256	
	<pre>UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ====== Excerpt from Tool log ======= Source Drive: Model Number: WDC WD2500JB-22FUA0 Serial Number: WD-WMAEP1925256 ======= Hashes:</pre>	
	UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD2500JB-22FUA0 Serial Number: WDC-WDAEP1925256	
	<pre>UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD2500JB-22FUA0 Serial Number: WD-WMAEP1925256 ========= Hashes: Hash values calculated during initial creation:</pre>	
	<pre>UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD2500JB-22FUA0 Serial Number: WD-WMAEP1925256 ========= Hashes: Hash values calculated during initial creation: Total (md5): 62c9436930204e0f38921771aca1bb88</pre>	
	<pre>UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD2500JB-22FUA0 Serial Number: WDC-WMAEP1925256 ========= Hashes: Hash values calculated during initial creation: Total (md5): 62c9436930204e0f38921771aca1bb88 Total (sha1): 7ddff1a74b2e2b7e7ee43c41cd9066e27986644d</pre>	
	<pre>UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD2500JB-22FUA0 Serial Number: WD-WMAEP1925256 ========= Hashes: Hash values calculated during initial creation: Total (md5): 62c9436930204e0f38921771acalbb88</pre>	
	<pre>UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD2500JB-22FUA0 Serial Number: WDC-WMAEP1925256 ======== Hashes: Hash values calculated during initial creation: Total (md5): 62c9436930204e0f38921771aca1bb88 Total (sha1): 7ddff1a74b2e2b7e7ee43c41cd9066e27986644d</pre>	
	<pre>UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD2500JB-22FUA0 Serial Number: WDC-WMAEP1925256 ======== Hashes: Hash values calculated during initial creation: Total (md5): 62c9436930204e0f38921771aca1bb88 Total (sha1): 7ddff1a74b2e2b7e7ee43c41cd9066e27986644d</pre>	
	<pre>UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 da-06-ata48.001 2 2097152000 da-06-ata48.002 3 2097152000 da-06-ata48.003 118 2097152000 da-06-ata48.118 119 2097152000 da-06-ata48.120 ======= Excerpt from Tool log ======= Source Drive:</pre>	

Assertion & Expected Result	Actual Result
AM-01 Source acquired using interface AI.	as expected
AM-02 Source is type DS.	as expected
AM-03 Execution environment is XE.	as expected
AM-05 An image is created on file system type FS.	as expected
AM-06 All visible sectors acquired.	as expected
AM-08 All sectors accurately acquired.	as expected
AO-01 Image file is complete and accurate.	as expected
AO-05 Multifile image created.	as expected
AO-22 Tool calculates hashes by block.	option not available
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

5.2.13 DA-06-FW

Test Case DA-	-06-FW Sumuri Paladin 3.0.0
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.
Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool creates an image file on file system type FS. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.
Tester Name:	jrr
Test Host:	Scimitar
Test Date:	Fri Oct 5 10:23:33 2012
Drives:	<pre>src(63-FU2) dst (none) other (0C-FU)</pre>
Source Setup:	<pre>src hash (SHA256): < EC8EF011494BA6DA18F74C47547C3E74E7180585096A830F9247A98EF613BB1D > src hash (SHA1): < F7069EDCBEAC863C88DECED82159F22DA96BE99B > src hash (MD5): < EE217BC4FA4F3D1B4021D29B065AA9EC > 117304992 total sectors (60060155904 bytes) Model (SP0612N) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 004192902 0000/001/01 0260/254/63 Boot 06 Fat16 2 X 004192965 113097600 0261/000/01 1023/254/63 OF extended 3 S 00000063 113097537 0261/001/01 1023/254/63 OF extended 3 S 000000063 113097537 0261/001/01 1023/254/63 OF extended 4 S 00000000 00000000 0000/000/00 0000/000/00 00</pre>
Log Highlights:	<pre>===== Tool Settings: ====== format dd size 2000 MB OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux ====== Image file segments ====== 1 2097152000 2012-10-04 16:30 da-06-fw.001 2 2097152000 2012-10-04 16:31 da-06-fw.002 3 2097152000 2012-10-04 16:32 da-06-fw.003 27 2097152000 2012-10-04 16:55 da-06-fw.027 28 2097152000 2012-10-04 16:55 da-06-fw.028 29 1339899904 2012-10-04 16:57 da-06-fw.028 29 1339899904 2012-10-04 16:57 da-06-fw.029 ======== Excerpt from Tool log ======= Source Drive: Source Drive: Source Physical device DMI SAMSUNG SP0612N 60GB (/dev/sdc) ========== Hashes: Hash values calculated during initial creation: Total (md5): ee17bc4fa4f3d1b4021d29b065aa9ec Total (shal): f7069edcbeac863c88deced82159f22da96be99b ========== End of Excerpt from Tool log =======</pre>

	===== Source drive rehash ===== Rehash (SHA1) of source: F7069EDCBEAC863C88DECED82159F22DA96BE99B	
Results:		
	Assertion & Expected Result	Actual Result
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.14 DA-06-SATA28

Case Summary:	DA-06 Acquire a physical device using access interf	
Summary:		ace Al to an image file.
Assertions:	AM-01 The tool uses access interface SRC-AI to acce AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XH AM-05 If image file creation is specified, the tool file system type FS. AM-06 All visible sectors are acquired from the dig AM-08 All sectors acquired from the digital source AO-01 If the tool creates an image file, the data r file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a r the individual files shall be no larger than the re AO-22 If requested, the tool calculates block hashe size during an acquisition for each block acquired AO-23 If the tool logs any log significant informat	c. creates an image file on gital source. are acquired accurately. represented by the image requested size then all equested size. as for a specified block from the digital source.
	accurately recorded in the log file. AO-24 If the tool executes in a forensically safe e	execution environment, the
	digital source is unchanged by the acquisition proc	
Tester	jrr	
Name:	-	
Test Host:	Scimitar	
Test Date: Drives:	Wed Aug 29 09:13:05 2012	
Source	<pre>src(07-SATA) dst (none) other (OC-FU) src hash (SHA256): <</pre>	
Setup:	CE65C4A3C3164D3EBAD58D33BB2415D29E260E1F88DC5A131B1 src hash (SHA1): < 655E9BDDB36A3F9C5C4CC8BF32B8C5B4 src hash (MD5): < 2EAF712DAD80F66E30DEA00365B4579E 156301488 total sectors (80026361856 bytes) Model (WDC WD800JD-32HK) serial # (WD-WMAJ91510044) N Start LBA Length Start C/H/S End C/H/S bc 1 P 00000063 156280257 0000/001/01 1023/254/63 bc 2 P 00000000 00000000 0000/000/00 0000/000/00 3 P 00000000 00000000 0000/000/00 0000/000/00 4 P 00000000 00000000 0000/000/00 0000/000/00 1 156280257 sectors 80015491584 bytes	11AF9F52E > 3 > bot Partition type
Log Highlights:	===== Tool Settings: ===== format E01 size 2000 MB OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu S UTC 2012 i686 i686 i386 GNU/Linux	SMP Tue Apr 10 22:19:09
	<pre>====== Image file segments ====== 1 1897532780 2012-08-29 09:54 da-06-sata28.E0 2 2647 2012-08-29 09:54 da-06-sata28.log ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD800JD-32HKA0 Serial Number: WD-WMAJ91510044 ======== Hashes: Hash values calculated during initial creation: Total (md5): 2eaf712dad80f66e30dea00365b4579b MD5 hash calculated over data: 2eaf712dad80ff SHA1 hash calculated over data: 655e9bddb36a3f9c5c4cc8bf32b8c5b41af9f52e ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: 655E9BDDB36A3F9c5c4cc8bF32</pre>	g.txt 66e30dea00365b4579b
_		
Results:		

	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	A0-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.15 DA-06-SATA48

Test Case DA-	06-SATA48 Sumuri Paladin 3.0.0	
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.	
Assertions:	AM-01 The tool uses access interface SRC-AI to access the digital source AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool creates an image fil on file system type FS. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurate AO-01 If the tool creates an image file, the data represented by the ima file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then al the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified blo size during an acquisition for each block acquired from the digital sour AO-23 If the tool logs any log significant information, the information accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.	
Tester Name:	jrr	
Test Host:	Scimitar	
Test Date:	Wed Sep 5 11:17:35 2012	
Drives:	src(0D-SATA) dst (none) other (OC-FU)	00001255
Source Setup:	<pre>src hash (SHA1): < BAAD80E8781E55F2E3EF528CA73BD41I src hash (MD5): < 1FA7C3CBE60EB9E89863DED2411E40C9 488397168 total sectors (250059350016 bytes) 30400/254/63 (max cyl/hd values) 30401/255/63 (number of cyl/hd) Model (WDC WD2500JD-22F) serial # (WD-WMAEH2678216) N Start LBA Length Start C/H/S End C/H/S bo 1 P 00000063 488375937 0000/001/01 1023/254/63 Bo 2 P 00000000 00000000 0000/000/00 0000/000/00 3 P 00000000 00000000 0000/000/00 0000/000/00 4 P 00000000 00000000 0000/000/00 0000/000/00 1 488375937 sectors 250048479744 bytes</pre>)) pot Partition type
Highlights:	<pre>ghlights: ====== Tool Settings: ====== format dd size 2000 MB OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 2 UTC 2012 i686 i686 i386 GNU/Linux ====== Image file segments ====== 1 1897532780 2012-08-29 09:54 da-06-sata28.E01 2 2647 2012-08-29 09:54 da-06-sata28.log.txt ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD800JD-32HKA0 Serial Number: WDC-WMAJ91510044 ==================================</pre>	
Results:	======= End of Excerpt from Tool log ======= ====== Source drive rehash ===== Rehash (SHA1) of source: BAAD80E8781E55F2E3EF528CA7	73BD41D228C1377
	Assertion & Expected Result	Actual Result

	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.16 DA-06-SCSI

Test Case DA-	06-SCSI Sumuri Paladin 3.0.0	
Case Summary:	DA-06 Acquire a physical device using access interf	
Assertions:	AM-01 The tool uses access interface SRC-AI to acce AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE AM-05 If image file creation is specified, the tool on file system type FS. AM-06 All visible sectors are acquired from the dig AM-08 All sectors acquired from the digital source AO-01 If the tool creates an image file, the data r file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a r the individual files shall be no larger than the re AO-22 If requested, the tool calculates block hashe size during an acquisition for each block acquired AO-23 If the tool logs any log significant informat accurately recorded in the log file. AO-24 If the tool executes in a forensically safe en the digital source is unchanged by the acquisition for	creates an image file ital source. are acquired accurately. epresented by the image equested size then all quested size. s for a specified block from the digital source. ion, the information is xecution environment,
Tester Name:	jrr	
Test Host:	frank	
Test Date:	Fri Aug 31 13:47:44 2012	
Drives:	<pre>src(E0) dst (none) other (OF-FU) </pre>	
Source Setup:	<pre>src hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7FA61 src hash (MD5): < A97C8F36B7AC9D5233B90AC09284F938 17938985 total sectors (9184760320 bytes) Model (ATLAS10K2-TY092J) serial # (169028142436)</pre>	
Log Highlights:	: ===== Tool Settings: ===== format E01 size 2000 MB OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:1 UTC 2012 i686 i686 i386 GNU/Linux	
	<pre>===== Image file segments ===== 1 137220479 2012-08-31 02:50 da-06-scsi.E01 2 1138 2012-08-31 02:50 da-06-scsi.log.tx ======= Excerpt from Tool log ====== Source Drive: /dev/sde: QUANTUM ATLAS10K2-TY092J DDD6 =========== Hashes: Hash values calculated during initial creation: Total (md5): a97c8f36b7ac9d5233b90ac09284f938 MD5 hash calculated over data:</pre>	
	====== Source drive rehash ====== Rehash (SHA1) of source: 4A6941F1337A8A22B10FC844B4	D7FA6158BECB82
Results:	Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created. AO-22 Tool calculates hashes by block.	Actual Result as expected as expected as expected as expected as expected as expected as expected as expected option not available
	AO-23 Logged information is correct.	as expected

Test Case DA-)6-SCSI Sumuri Paladin 3.0.0		
	A0-24 Source is unchanged by acquisition.	as expected	
Analysis:	Expected results achieved		

5.2.17 DA-06-USB

	-06-USB Sumuri Paladin 3.0.0	
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.	
Assertions:	AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS.	
	AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool creates an image file on	
	file system type FS. AM-06 All visible sectors are acquired from the digital source.	
	AM-08 All sectors acquired from the digital source are acquired accurately. AO-01 If the tool creates an image file, the data represented by the image	
	<pre>file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then al the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source</pre>	
	AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the	
	digital source is unchanged by the acquisition process.	
Tester Name:	jrr	
Test Host:	Scimitar	
Test Date:	Wed Aug 29 14:57:35 2012	
Drives: Source	<pre>src(63-FU2) dst (none) other (OC-FU) src hash (SHA256): <</pre>	
Setup:	EC8EF011494BA6DA18F74C47547C3E74E7180585096A830F9247A98EF613BB1D >	
Decap	<pre>src hash (SHA1): < F7069EDCBEAC863C88DECED82159F22DA96BE99B ></pre>	
	src hash (MD5): < EE217BC4FA4F3D1B4021D29B065AA9EC >	
	117304992 total sectors (60060155904 bytes)	
	Model (SP0612N) serial # ()	
	N Start LBA Length Start C/H/S End C/H/S boot Partition type	
	1 P 000000063 004192902 0000/001/01 0260/254/63 Boot 06 Fat16	
	2 X 004192965 113097600 0261/000/01 1023/254/63 OF extended	
	3 S 000000063 113097537 0261/001/01 1023/254/63 0B Fat32	
	4 S 00000000 00000000 0000/000/00 0000/00/0	
	5 P 00000000 00000000 0000/00/00 0000/00 00	
	6 P 00000000 00000000 0000/000/00 0000/000/00 00	
	1 004192902 sectors 2146765824 bytes	
	3 113097537 sectors 57905938944 bytes	
Log Highlights:	===== Tool Settings: ======	
1129112291100	format dd	
	size 2000 MB	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux	
	<pre>===== Image file segments ====== 1 2097152000 2012-08-29 15:23 da-06-usb.001 2 2097152000 2012-08-29 15:25 da-06-usb.002 3 2097152000 2012-08-29 15:26 da-06-usb.003</pre>	
	 27 2097152000 2012-08-29 15:56 da-06-usb.027	
	28 2097152000 2012-08-29 15:57 da-06-usb.028 29 1339899904 2012-08-29 15:58 da-06-usb.029 ====== Excerpt from Tool log =======	
	Source Drive: Source Physical device SAMSUNG SP0612N 215C1FA1CF 60GB (/dev/sdb) ============== Hashes:	
	Hash values calculated during initial creation: Total (md5): ee217bc4fa4f3d1b4021d29b065aa9ec Total (sha1): f7069edcbeac863c88deced82159f22da96be99b	
	======= End of Excerpt from Tool log =======	

	====== Source drive rehash ======	
	Rehash (SHA1) of source: F7069EDCBEAC863C88DECED821	59F22DA96BE99B
Results:		
	Assertion & Expected Result	Actual Result
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	A0-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	A0-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.18 DA-07-CF

Test Case DA-	-07-CF Sumuri Paladin 3.0.0	
Case	DA-07 Acquire a digital source of type DS to an ima	ge file.
Summary: Assertions:	AN 01 The tool was space interface ODC AT to space	an the divitel nounce
Assertions:	AM-01 The tool uses access interface SRC-AI to acce AM-02 The tool acquires digital source DS.	ss the digital source.
	AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE	
	AM-05 If image file creation is specified, the tool	
	file system type FS.	
	AM-06 All visible sectors are acquired from the dig	ital source.
	AM-08 All sectors acquired from the digital source	
	AO-01 If the tool creates an image file, the data r	epresented by the image
	file is the same as the data acquired by the tool.	
	AO-05 If the tool creates a multi-file image of a r the individual files shall be no larger than the re	-
	A0-22 If requested, the tool calculates block hashe	-
	size during an acquisition for each block acquired	_
	AO-23 If the tool logs any log significant informat	ion, the information is
	accurately recorded in the log file.	
	AO-24 If the tool executes in a forensically safe e	
	digital source is unchanged by the acquisition proc	ess.
Tester	csr	
Name:		
Test Host:	MaGarrett	
Test Date:	Tue Aug 28 20:22:57 2012	
Drives:	src(C1-CF) dst (49-sata) other (none)	
Source Setup:	<pre>src hash (SHA256): < C7CF0218222DF80D5316511D6814266C7FA507C13F795AD3D32</pre>	200720150000
secup.	src hash (SHA1): < 5B8235178DF99FA307430C088F817466	
	src hash (MD5): < 776DF8B4D2589E21DEBCF589EDC16D78	
	503808 total sectors (257949696 bytes)	
	Model (CF) serial # ()	
	N Start LBA Length Start C/H/S End C/H/S bo	
	1 P 778135908 1141509631 0357/116/40 0357/032/45 B	
	2 P 168689522 1936028240 0288/115/43 0367/114/50 B 3 P 1869881465 1936028192 0366/032/33 0357/032/43	
	4 P 2885681152 000055499 0372/097/50 0000/010/00 B	
	1 1141509631 sectors 584452931072 bytes	
	2 1936028240 sectors 991246458880 bytes	
	3 1936028192 sectors 991246434304 bytes	
	4 000055499 sectors 28415488 bytes	
Log		
Highlights:	===== Tool Settings: ======	
	image size: 2GB	
	image format: dmg	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu S	MP Tue Apr 10 22:19:09
	UTC 2012 i686 i686 i386 GNU/Linux	
	====== Image file segments ======	
	1 257949696 Aug 28 19:57 da-07-cf.dmg	
	2 801 Aug 28 19:57 da-07-cf.log.txt	
	====== Excerpt from Tool log =======	
	Source Drive:	OFTMD (/dom/adb)
	Source C1-CF on Physical device Generic CF 0000001	ZJ/MB (/dev/SCD)
	Hash values calculated during initial creation:	
	Total (md5): 776df8b4d2589e21debcf589edc16d78	
	Total (shal): 5b8235178df99fa307430c088f81746606638	a0b
	====== End of Excerpt from Tool log =======	
	====== Source drive rehash ======	01746606620105
	Rehash (SHA1) of source: 5B8235178DF99FA307430C088F	01/40000038AUB
Results:		
	Assertion & Expected Result	Actual Result

Test Case DA	-07-CF Sumuri Paladin 3.0.0	
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.19 DA-07-EXFAT

Summary: Assertions: AN AN AN fi	A-07 Acquire a digital source of type DS to an image file. M-01 The tool uses access interface SRC-AI to access the digital source. M-02 The tool acquires digital source DS. M-03 The tool executes in execution environment XE. M-05 If image file creation is specified, the tool creates an image file on ile system type FS. M-06 All visible sectors are acquired from the digital source. M-08 All sectors acquired from the digital source are acquired accurately.
Assertions: AN AN AN AN fi	M-02 The tool acquires digital source DS.M-03 The tool executes in execution environment XE.M-05 If image file creation is specified, the tool creates an image file on ile system type FS.M-06 All visible sectors are acquired from the digital source.M-08 All sectors acquired from the digital source are acquired accurately.
AC fi AC th AC si AC aC AC	 0-01 If the tool creates an image file, the data represented by the image ile is the same as the data acquired by the tool. 0-05 If the tool creates a multi-file image of a requested size then all he individual files shall be no larger than the requested size. 0-22 If requested, the tool calculates block hashes for a specified block fize during an acquisition for each block acquired from the digital source. 0-23 If the tool logs any log significant information, the information is ccurately recorded in the log file. 0-24 If the tool executes in a forensically safe execution environment, the ligital source is unchanged by the acquisition process.
	sr
Name: Test Host: Mo	lcGarrett
	'ue Aug 28 03:43:54 2012
	rc(49-sata) dst (none) other (OF-FU)
	rc hash (SHA1): < 6EC98F42EB5914D1F9D1661C0BB0A3660569F95B > rc hash (MD5): < 30BAB74F67783C0555BCBD73DD4D0D5E >
19 Mo 1 1 2 3 4 4 1 3 4 9 1 3 4 9 1 3 4 9	56301488 total sectors (80026361856 bytes) todel (ST380815AS) serial # (5QZ5TD8Y) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000002048 010485760 0000/032/33 0652/213/09 07 NTFS 2 P 010490445 005863725 0653/000/01 1017/254/63 83 Linux 3 P 016354170 007807590 1018/000/01 1023/254/63 83 Linux 4 P 00000000 00000000 0000/000 0000/000 0000/000 00 0000807560 sectors 5368709120 bytes 005863725 sectors 3002227200 bytes 007807590 sectors 3997486080 bytes 9-SATAEXFAT-sha256 10485760 309F5D1C2BC16E02F9C87A6AC8D79308F636B34DC002081757C4564A1373497 9-SATAEXFAT-shalsum 10485760 3D44F34844E82F9DEDDD5CDC33E18EC066CF1EAB 9-SATAEXFAT-md5sum 10485760 E85782BF9358629D0115B70EEDE2C616
Highlights: == in in OS UT == Sc Sc Tc Tc ==	<pre>===== Tool Settings: ===== mage size: 2GB mage format: dmg DS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 TC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 Aug 28 03:59 da-07-exFAT.002.dmgpart 2 1174405120 Aug 28 04:00 da-07-exFAT.003.dmgpart 3 2097152000 Aug 28 03:58 da-07-exFAT.log.txt ====== Excerpt from Tool log ======= fource Drive: Model Number: ST380815AS Serial Number: SU380815AS Serial Number: SU380815AS SU38080</pre>

	Rehash (MD5) of source: 80026361856 bytes (80 GB) copied6EC98F42EB5914D1F9D1661C0BB0A3660569F95B	
Results:	Acception (Tempeted Desult	Astual Desult
	Assertion & Expected Result AM-01 Source acquired using interface AI.	Actual Result
	AM-01 Source acquired using interface AI. AM-02 Source is type DS.	as expected as expected
	AM-02 Source is type DS. AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	A0-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.20 DA-07-EXT2

Test Case DA	-07-EXT2 Sumuri Paladin 3.0.0		
Case	DA-07 Acquire a digital source of type DS to an image file.		
Summary:			
Assertions:	AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool creates an image file on file system type FS. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the		
	digital source is unchanged by the acquisition process.		
Tester	csr		
Name:			
Test Host:	DeathStar		
Test Date: Drives:	Tue Sep 11 07:34:19 2012 src(43) dst (none) other (OC-FU)		
Source	src hash (SHA256): $<$		
Setup:	2658F47603DE6B1D833B64823E9733F578658D08D06A4BB8C05324F57BDC615E > src hash (SHA1): < 888E2F7FAD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EFA50E778PBA1E65A5AEEF7 > 78125000 total sectors (4000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 00000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 00000063 002104515 1023/000/01 1023/254/63 05 extended 5 S 00000063 00210452 1023/001/01 1023/254/63 05 extended 7 S 00000063 004192902 1023/001/01 1023/254/63 05 extended 7 S 00000063 004192902 1023/001/01 1023/254/63 05 extended 9 S 00000063 004192902 1023/001/01 1023/254/63 05 extended 11 S 00000063 010490382 1023/001/01 1023/254/63 05 extended 11 S 00000063 010490382 1023/001/01 1023/254/63 05 extended 11 S 00000063 010490382 1023/001/01 1023/254/63 05 extended 13 S 00000063 004208967 1023/001/01 1023/254/63 05 extended 14 x 029431080 027712125 1023/001/01 1023/254/63 05 extended 15 S 000000063 027712125 1023/001/01 1023/254/63 05 extended 15 S 000000063 027712125 1023/001/01 1023/254/63 05 extended 15 S 000000063 0027712125 1023/001/01 1023/254/63 05 extended 15 S 000000063 007712125 1023/001/01 1023/254/63 05 extended 15 S 000000063 027712125 1023/001/01 1023/254/63 05 extended 15 S 000000063 027712125 1023/001/01 1023/254/63 05 extended 15 S 000000060 0000/000/00 0000/000/00 00 empty entry 17 P 00000000 00000000 0000/000/00 000/000/		
Log Highlights:	===== Tool Settings: ===== image size: 2GB image format: dd		
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09		

Test Case DA-	07-EXT2 Sumuri Paladin 3.0.0		
	UTC 2012 i686 i686 i386 GNU/Linux		
	<pre>===== Image file segments ===== 1 2097152000 Sep 11 07:54 da-07-ext2.001 2 2097152000 Sep 11 07:55 da-07-ext2.002 3 1176771584 Sep 11 07:56 da-07-ext2.003 4 3003 Sep 11 07:56 da-07-ext2.log.txt ======= Excerpt from Tool log ======= Source Drive: Model Number: WDC WD400BB-75JHC0 Serial Number: WDC-WMAMC4658888 =================================</pre>	£57	
	====== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD93F325065E5871		
Results:			
	Assertion & Expected Result	Actual Result	
	AM-01 Source acquired using interface AI.	as expected	
	AM-02 Source is type DS.	as expected	
	AM-03 Execution environment is XE.	as expected	
	AM-05 An image is created on file system type FS.	as expected	
	AM-06 All visible sectors acquired.	as expected	
	AM-08 All sectors accurately acquired.	as expected	
	AO-01 Image file is complete and accurate.	as expected	
	AO-05 Multifile image created.	as expected	
	AO-22 Tool calculates hashes by block.	option not available	
	AO-23 Logged information is correct.	as expected	
	AO-24 Source is unchanged by acquisition.	as expected	

5.2.21 DA-07-EXT3

Test Case DA-0	07-EXT3 Sumuri Paladin 3.0.0	
Case	DA-07 Acquire a digital source of type DS to an image file.	
Summary:		
Assertions:	AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool creates an image file on file system type FS. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment,	
	the digital source is unchanged by the acquisition	process.
Tester Name:	csr	
Test Host:	McGarrett	
Test Date:	Tue Aug 28 04:43:25 2012	
Drives:	<pre>src(49-sata) dst (none) other (0F-FU)</pre>	
Source Setup:	N Start LBA Length Start C/H/S End C/H/S bo 1 P 000002048 010485760 0000/032/33 0652/213/09	> TD8Y) ot Partition type 07 NTFS
-	2 P 010490445 005863725 0653/000/01 1017/254/63 3 P 016354170 007807590 1018/000/01 1023/254/63 4 P 000000000 00000000 0000/000/00 0000/000/00 1 010485760 sectors 5368709120 bytes 2 005863725 sectors 3002227200 bytes 3 007807590 sectors 3997486080 bytes 49-SATAEXT3-md5sum 5863725 A25176AE775F65181DAC8C8D 49-SATAEXT3-shalsum 5863725 FDF0F2BA2D4CB2D45E45717	83 Linux 00 empty entry 051DDF5D
Log Highlights:	====== Tool Settings: ===== image size: 2GB image format: dd OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu S	MP Tue Apr 10 22:19:09
	<pre>UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ===== 1 2097152000 Aug 28 04:52 da-07-ext3.001 2 905075200 Aug 28 04:52 da-07-ext3.002 3</pre>	
Results:	Assertion & Expected Result	Actual Result

	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	A0-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.22 DA-07-EXT4

Case	D7-EXT4 Sumuri Paladin 3.0.0 DA-07 Acquire a digital source of type DS to an image file.
Summary:	
Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool creates an image file on file system type FS. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.
Tester Name: Test Host:	csr McGarrett
Test Date:	Tue Aug 28 18:08:42 2012
Drives:	src(49-sata) dst (none) other (OF-FU)
Source Setup:	<pre>src(49-sata) dst (none) other (UF-FU) src hash (SHA1): < 6EC98F42EB5914D1F9D1661C0BB0A3660569F95B > src hash (MD5): < 30BAB74F67783C0555BCBD73DD4D05E > 156301488 total sectors (80026361856 bytes) Model (ST380815AS) serial # (5QZ5TD8Y) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000002048 010485760 0000/032/33 0652/213/09 07 NTFS 2 P 010490445 005863725 0653/000/01 1017/254/63 83 Linux 3 P 016354170 007807590 1018/000/01 1023/254/63 83 Linux 4 P 00000000 00000000 0000/000/00 0000/000/00 00</pre>
Log Highlights:	<pre>49-SATAEXT4-shalsum 7807590 F28A79F5E5CD28F859A1AC6B18A2CA3682D15A2A ====== Tool Settings: ====== image size: 2GB image format: E01 OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ====== 1 58366574 Aug 28 18:24 da-07-ext4.E01 2 2884 Aug 28 18:24 da-07-ext4.log.txt ====== Excerpt from Tool log =======</pre>
	Source Drive: Model Number: ST380815AS Serial Number: 5QZ5TD8Y ====================================

Test Case DA-07-EXT4 Sumuri Paladin 3.0.0		
	Assertion & Expected Result	Actual Result
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.23 DA-07-F12

-07-F12 Sumuri Paladin 3.0.0		
DA-07 Acquire a digital source of type DS to an image file.		
AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool creates an image file on file system type FS. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.		
A0-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.		
csr		
McGarrett		
Thu Aug 30 03:12:25 2012		
<pre>src(43) dst (none) other (0F-FU)</pre>		
<pre>src hash (SHA256): < 2658F47603DE6B1D883B64823E9733F578658D08D06A4BB8C053C4F57BDC615E > src hash (SHA1): < 888E2F7F7AD237DC7A732281DD93F325065E5871 > src hash (SHA1): < 888E2F7F7AD237DC7A732281DD93F325065E5871 > src hash (SHA1): < 888E2F7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < EC39C3F7EF7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (400000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 00000063 020980827 0000/001/01 1023/254/63 0F extended 3 s 00000063 002104515 1023/000/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 s 00000063 002104515 1023/000/01 1023/254/63 05 extended 5 s 00000063 004192902 1023/001/01 1023/254/63 05 extended 7 s 00000063 004492902 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/001/01 1023/254/63 0B Fat32 11 s 00000063 00420930 1023/000/01 1023/254/63 05 extended 13 s 00000063 00420930 1023/001/01 1023/254/63 05 extended 13 s 00000063 0027712162 1023/001/01 1023/254/63 05 extended 13 s 00000063 0027712162 1023/001/01 1023/254/63 05 extended 14 x 029431080 027712162 1023/001/01 1023/254/63 07 NTFS 16 s 00000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 s 00000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 s 00000006 0000/000/00 0000/000/00 000 empty entry 18 P 00000000 00000000 0000/000/00 000 /000/00 00</pre>		
===== Tool Settings: ===== image size: 2GB image format: E01		

Test Case DA-	07-F12 Sumuri Paladin 3.0.0		
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09		
	UTC 2012 i686 i686 i386 GNU/Linux		
	===== Image file segments ======		
	1 349969 Aug 30 03:58 da-07-FAT12.E01		
	2 3209 Aug 30 03:58 da-07-FAT12.log.txt		
	====== Excerpt from Tool log ======= Source Drive:		
	Model Number: WDC WD400BB-75JHC0		
	Serial Number: WD-WMAMC4658888		
	Serial Number: WD-WMAMC4658888		
	Hash values calculated during initial creation:		
	Total (md5): cba0c9984f51778e89def0c6bed06864		
	MD5 hash calculated over data: cba0c9984f5177	78e89def0c6bed06864	
	SHA1 hash calculated over data:		
	6853b517f50bf3ccaded3db5feae08c18c62fca0		
	Hash values for verification started at 20120830 03:58:22:		
	MD5 hash stored in file: cba0c9984f51778e89def0c6bed06864		
	MD5 hash calculated over data: cba0c9984f51778e89def0c6bed06864		
	SHA1 hash stored in file: 6853b517f50bf3ccaded3db5feae08c18c62fca0		
	SHA1 hash calculated over data:		
	6853b517f50bf3ccaded3db5feae08c18c62fca0		
	====== End of Excerpt from Tool log =======		
	====== Source drive rehash ======		
	Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD93F325065E5871		
Results:			
	Assertion & Expected Result	Actual Result	
	AM-01 Source acquired using interface AI.	as expected	
	AM-02 Source is type DS.	as expected	
	AM-03 Execution environment is XE.	as expected	
	AM-05 An image is created on file system type FS.	as expected	
	AM-06 All visible sectors acquired.	as expected	
	AM-08 All sectors accurately acquired.	as expected	
	AO-01 Image file is complete and accurate.	as expected	
	AO-05 Multifile image created.	as expected	
	AO-22 Tool calculates hashes by block.	option not available	
	AO-23 Logged information is correct.	as expected	
	AO-24 Source is unchanged by acquisition.	as expected	
Analysis:	Expected results achieved		

5.2.24 DA-07-F16

	07-F16 Sumuri Paladin 3.0.0				
Case Summary:	DA-07 Acquire a digital source of type DS to an imag	ge Ille.			
Assertions:	AM-01 The tool uses access interface SRC-AI to acces	ss the digital source.			
	AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE				
	AM-05 If image file creation is specified, the tool creates an image file on file system type FS.				
	AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.				
					A0-24 If the tool executes in a forensically safe ex
				digital source is unchanged by the acquisition proce	
Tester Name:				csr	
Test Host:				McGarrett	
Test Date:	Thu Aug 30 03:12:25 2012				
Drives:	<pre>src(43) dst (none) other (0F-FU)</pre>				
Source	<pre>src hash (SHA256): <</pre>				
Setup:	2658F47603DE6B1D883B64823E9733F578658D08D06A4BB8C05				
	<pre>src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F3250 src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7</pre>				
	78125000 total sectors (4000000000 bytes)	-			
	Model (0BB-75JHC0) serial # (WD-WMAMC465	88)			
	N Start LBA Length Start C/H/S End C/H/S boo				
	1 P 00000063 020980827 0000/001/01 1023/254/63	OC Fat32X			
	2 X 020980890 057143205 1023/000/01 1023/254/63 3 S 000000063 000032067 1023/001/01 1023/254/63	0F extended 01 Fat12			
	4 x 000032130 002104515 1023/000/01 1023/254/63	05 extended			
	5 S 00000063 002104452 1023/001/01 1023/254/63	06 Fat16			
	6 x 002136645 004192965 1023/000/01 1023/254/63	05 extended			
	7 S 00000063 004192902 1023/001/01 1023/254/63	16 other			
	8 x 006329610 008401995 1023/000/01 1023/254/63 9 S 000000063 008401932 1023/001/01 1023/254/63	05 extended 0B Fat32			
	10 x 014731605 010490445 1023/000/01 1023/254/63	05 extended			
	11 S 00000063 010490382 1023/001/01 1023/254/63	83 Linux			
	12 x 025222050 004209030 1023/000/01 1023/254/63	05 extended			
	13 S 00000063 004208967 1023/001/01 1023/254/63	82 Linux swap			
	14 x 029431080 027712125 1023/000/01 1023/254/63 15 s 00000063 027712062 1023/001/01 1023/254/63	05 extended			
	16 S 00000000 00000000 0000/00 0000/00 0000/00	07 NTFS 00 empty entry			
	17 P 00000000 00000000 0000/000/00 0000/00/0	00 empty entry			
	18 P 00000000 00000000 0000/000/00 0000/000/00	00 empty entry			
	1 020980827 sectors 10742183424 bytes				
	3 000032067 sectors 16418304 bytes				
	5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes				
	9 008401932 sectors 4301789184 bytes				
	11 010490382 sectors 5371075584 bytes				
	13 004208967 sectors 2154991104 bytes				
	15 027712062 sectors 14188575744 bytes	00007			
	43F16-md5sum 1077479423 37E81FFB31C3CB38AA48B223750 43F16-shalsum 1077479423 443CCEC9A22F726DAF6CE38481				
	43F16-shalsum 1077479423 443CCEC9A22F726DAF6CE38481 43F16-shalsum 1077479423 443CCEC9A22F726DAF6CE38481				
Log					
Highlights:	===== Tool Settings: =====				
	image size: 2GB image format: DMG				

Test Case DA-07-F16 Sumuri Paladin 3.0.0 OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux ===== Image file segments ====== 1 1077479424 Aug 30 04:12 da-07-FAT16.dmg 2 2756 Aug 30 04:12 da-07-FAT16.log.txt ====== Excerpt from Tool log ======= Source Drive: WDC WD400BB-75JHC0 Model Number: Serial Number: WD-WMAMC4658888 ========== Hashes: Hash values calculated during initial creation: Total (md5): 37e81ffb31c3cb38aa48b2237500908e Total (shal): 443ccec9a22f726daf6ce384817151c83b3ebc8b ====== End of Excerpt from Tool log ======= ===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD93F325065E5871 Results: Assertion & Expected Result Actual Result AM-01 Source acquired using interface AI. as expected AM-02 Source is type DS. as expected AM-03 Execution environment is XE. as expected as expected AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. as expected AM-08 All sectors accurately acquired. as expected AO-01 Image file is complete and accurate. as expected AO-05 Multifile image created. as expected AO-22 Tool calculates hashes by block. option not available AO-23 Logged information is correct. as expected A0-24 Source is unchanged by acquisition. as expected Analysis: Expected results achieved

5.2.25 DA-07-F32

	07-F32 Sumuri Paladin 3.0.0	
Case Summary:	DA-07 Acquire a digital source of type DS to an image file.	
Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool creates an image file on file system type FS. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process. 	
Tester	csr	
Name:		
Test Host:	McGarrett	
Test Date: Drives:	Thu Aug 30 03:12:25 2012 src(43) dst (none) other (0F-FU)	
Source	src(43) dst (hone) other (0F-F0) src hash (SHA256): <	
Setup:	2658F47603DE6B1D883B64823E9733F578658D08D06A4BB8C053C4F57BDC615E > src hash (SHA1): < 8888227F7AD237Dc7A732281DD93F325065E871 > src hash (MD5): < 8C39C397FE7A50577B9EAL65A5AEEF7 > 78125000 total sectors (4000000000 bytes) Model (D8B-75JHCO) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 00000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0I Fat12 4 x 000032130 002104515 1023/001/01 1023/254/63 05 extended 5 S 00000063 002104515 1023/001/01 1023/254/63 05 extended 5 S 00000063 002104515 1023/001/01 1023/254/63 05 extended 7 S 00000063 004192902 1023/001/01 1023/254/63 05 extended 7 S 00000063 004192902 1023/001/01 1023/254/63 05 extended 1 S 00000063 004192902 1023/001/01 1023/254/63 05 extended 1 S 00000063 004492902 1023/001/01 1023/254/63 05 extended 1 S 00000063 00449282 1023/001/01 1023/254/63 05 extended 1 S 00000063 00449282 1023/001/01 1023/254/63 05 extended 1 S 00000063 00449382 1023/001/01 1023/254/63 05 extended 1 S 00000063 004208967 1023/001/01 1023/254/63 05 extended 1 S 00000063 00712125 1023/001/01 1023/254/63 05 extended 1 S 00000006 0000/000/00 0000/000/00 000 empty entry 1 P 00000000 00000000 0000/000/00 0000/000/00 00	
Log Highlights:	===== Tool Settings: ===== image size: 2GB image format: dd	

Test Case D		
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu S	SMP Tue Apr 10 22:19:09
	UTC 2012 i686 i686 i386 GNU/Linux	
	====== Image file segments ======	
	1 2097152000 Aug 30 05:40 da-07-f32.001	
	2 2097152000 Aug 30 05:41 da-07-f32.002	
	3 107485184 Aug 30 05:41 da-07-f32.003	
	4 2994 Aug 30 05:41 da-07-f32.log.txt	
	====== Excerpt from Tool log =======	
	Source Drive:	
	Model Number: WDC WD400BB-75JHC0	
	Serial Number: WD-WMAMC4658888	
	========== Hashes:	
	Hash values calculated during initial creation:	
	Total (md5): 2c4d8d450e5ad28329f616d87114ccfe	
	Total (shal): 72462489bcf79a98b59b6a8cd938feb46fa2a	1781
	====== End of Excerpt from Tool log =======	
Results:		093F325065E5871
Results:	====== Source drive rehash ======	093F325065E5871 Actual Result
Results:	====== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD	
Results:	====== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result	Actual Result
Results:	<pre>====== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI.</pre>	Actual Result as expected
Results:	<pre>====== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS.</pre>	Actual Result as expected as expected
Results:	<pre>====== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE.</pre>	Actual Result as expected as expected as expected
Results:	<pre>====== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS.</pre>	Actual Result as expected as expected as expected as expected
Results:	<pre>====== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired.</pre>	Actual Result as expected as expected as expected as expected as expected
Results:	<pre>===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DE Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired.</pre>	Actual Result as expected as expected as expected as expected as expected as expected
Results:	<pre>===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DE Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate.</pre>	Actual Result as expected as expected as expected as expected as expected as expected as expected as expected
Results:	<pre>===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DE Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created. AO-22 Tool calculates hashes by block. AO-23 Logged information is correct.</pre>	Actual Result as expected as expected as expected as expected as expected as expected as expected as expected as expected
Results:	<pre>===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DE Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created. AO-22 Tool calculates hashes by block.</pre>	Actual Result as expected as expected as expected as expected as expected as expected as expected as expected as expected option not available
Results:	<pre>===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DE Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created. AO-22 Tool calculates hashes by block. AO-23 Logged information is correct.</pre>	Actual Result as expected as expected
Results:	<pre>===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DE Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created. AO-22 Tool calculates hashes by block. AO-23 Logged information is correct.</pre>	Actual Result as expected as expected

5.2.26 DA-07-F32X

Test Case DA	-07-F32X Sumuri Paladin 3.0.0	
Case	DA-07 Acquire a digital source of type DS to an image file.	
Summary:		
Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool creates an image file on file system type FS. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the 	
	digital source is unchanged by the acquisition process.	
Tester	CSr	
Name:		
Test Host:	DeathStar	
Test Date:	Tue Sep 11 07:36:48 2012	
Drives: Source	<pre>src(43) dst (none) other (OC-FU) src hash (SHA256): <</pre>	
Setup:	<pre>bloc Null 0:0:NL250' 0:0:NL2</pre>	
Log Highlights:	===== Tool Settings: ===== image size: 2GB image format:E01	

Test Case DA-	07-F32X Sumuri Paladin 3.0.0	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SU UTC 2012 i686 i686 i386 GNU/Linux	MP Tue Apr 10 22:19:09
	<pre>===== Image file segments ====== 1 .: 2 119 case.txt 3 0 ls.txt 2 3 /media/2TB_LACIE/da-07-F32X/: 4 160134725 da-07-F32X.E01 ====== Excerpt from Tool log ======= Source Drive: Model Number: WDC WD400BB-75JHC0 Serial Number: WDC-WMAMC4658888 ======== Hashes: Hash values calculated during initial creation: Total (md5): 5980cb0fa68e9862c65765df50f00906 MD5 hash calculated over data: 5980cb0fa68e98 SHAl hash calculated over data: 379c1ac47af956fc8c80389c2a7427a7f8fb4e89 ====== End of Excerpt from Tool log ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD</pre>	
Results:		
	Assertion & Expected Result	Actual Result
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.27 DA-07-NTFS

	-07-NTFS Sumuri Paladin 3.0.0	
Case Summary:	DA-07 Acquire a digital source of type DS to an image file.	
Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool creates an image file on file system type FS. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process. 	
Tester Name:	CST	
Test Host:	McGarrett	
Test Date:	Thu Aug 30 03:12:25 2012	
Drives:	<pre>src(43) dst (none) other (0F-FU)</pre>	
Source Setup:	<pre>src hash (SHA256): < 2658F47603DE6B1D883B64823E9733F578658D08D06A4BB8C053C4F57BDC615E > src hash (SHA1): < 8862E7F7AD237DC7A732281DD93F325065E5871 > src hash (SHA1): < 8862E7F7AD237DC7A732281DD93F325065E5871 > N Start Sectors (400000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 00000063 020980827 0000/001/01 1023/254/63 0F extended 3 S 00000063 00032067 1023/001/01 1023/254/63 0I Fat12 4 x 00032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 00000063 002104452 1023/001/01 1023/254/63 05 extended 6 x 002136645 004192965 1023/001/01 1023/254/63 05 extended 7 S 00000063 004492912 1023/001/01 1023/254/63 05 extended 9 S 00000063 00401932 1023/001/01 1023/254/63 05 extended 1 S 00000063 004499129 1023/001/01 1023/254/63 05 extended 11 S 00000063 00449924 1023/001/01 1023/254/63 05 extended 11 S 00000063 00440932 1023/001/01 1023/254/63 05 extended 13 S 00000063 004209301 1023/001/01 1023/254/63 05 extended 14 x 025222050 004209030 1023/001/01 1023/254/63 05 extended 15 S 00000063 004209367 1023/001/01 1023/254/63 05 extended 15 S 00000063 004209367 1023/001/01 1023/254/63 05 extended 15 S 00000063 027712062 1023/001/01 1023/254/63 05 extended 15 S 00000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 00000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 00000000 00000000 0000/000/00 0000/000/00 00</pre>	
Log Highlights:	===== Tool Settings: ===== image size: 2GB image format: dmg	

Test Case Da	A-07-NTFS Sumuri Paladin 3.0.0	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu S UTC 2012 i686 i686 i386 GNU/Linux	MP Tue Apr 10 22:19:09
	<pre>====== Image file segments ===== 1 2097152000 da-07-nfts.002.dmgpart 2 2097152000 da-07-nfts.003.dmgpart 3 2097152000 da-07-nfts.004.dmgpart 5 2097152000 da-07-nfts.006.dmgpart 6 1605663744 da-07-nfts.007.dmgpart 7 2097152000 da-07-nfts.dmg ====== Excerpt from Tool log ======= Source Drive: Model Number: WDC WD400BB-75JHC0 Serial Number: WDC-WMAMC4658888 ========== Hashes: Hash values calculated during initial creation: Total (md5): 5d42fa317c802acfef2d313092d7411e</pre>	
	Total (Md5): 54421a3176802a61612d313092d7411e Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ======= End of Excerpt from Tool log ======= ===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD	
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ======= End of Excerpt from Tool log ======= ===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD	93F325065E5871
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ======= End of Excerpt from Tool log ======= ===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result	93F325065E5871 Actual Result
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ======= End of Excerpt from Tool log ======= ===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI.	93F325065E5871 Actual Result as expected
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ======= End of Excerpt from Tool log ======= ===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS.	93F325065E5871 Actual Result as expected as expected
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE.	93F325065E5871 Actual Result as expected
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ======= End of Excerpt from Tool log ======= ===== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS.	93F325065E5871 Actual Result as expected as expected
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE.	93F325065E5871 Actual Result as expected as expected as expected
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS.	93F325065E5871 Actual Result as expected as expected as expected as expected as expected
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired.	93F325065E5871 Actual Result as expected as expected as expected as expected as expected as expected
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ====== End of Excerpt from Tool log ======= Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate.	93F325065E5871 Actual Result as expected as expected as expected as expected as expected as expected as expected as expected
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ====== End of Excerpt from Tool log ======= Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created.	Actual Result as expected as expected
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ====== End of Excerpt from Tool log ======= Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created. AO-22 Tool calculates hashes by block.	93F325065E5871 Actual Result as expected as expected as expected as expected as expected as expected as expected as expected as expected as expected
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created. AO-22 Tool calculates hashes by block. AO-23 Logged information is correct.	93F325065E5871 Actual Result as expected as expected
Results:	Total (shal): 73eb2d27564b060db796efb78694a10e6b43d ====== End of Excerpt from Tool log ======= Rehash (SHA1) of source: 888E2E7F7AD237DC7A732281DD Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created. AO-22 Tool calculates hashes by block.	93F325065E5871 Actual Result as expected as expected as expected as expected as expected as expected as expected as expected as expected as expected

5.2.28 DA-07-SWAP

Case	DA-07 Acquire a digital source of type DS to an ima	ge file.
Summary:	an of the back on the second states and at the second states when the states is a second state of the second states and the second states are second states and the second states are second s	
Assertions:	AM-01 The tool uses access interface SRC-AI to acce	ss the digital source.
	AM-02 The tool acquires digital source DS.	
	AM-03 The tool executes in execution environment XE	
	AM-05 If image file creation is specified, the tool	creates an image file of
	file system type FS.	ital course
	AM-06 All visible sectors are acquired from the dig AM-08 All sectors acquired from the digital source	
	AO-01 If the tool creates an image file, the data r	
	file is the same as the data acquired by the tool.	epresenced by the image
	AO-05 If the tool creates a multi-file image of a r	equested size then all
	the individual files shall be no larger than the re	-
	AO-22 If requested, the tool calculates block hashe	-
	size during an acquisition for each block acquired	—
	AO-23 If the tool logs any log significant informat	ion, the information is
	accurately recorded in the log file.	
	AO-24 If the tool executes in a forensically safe e	xecution environment, the
	digital source is unchanged by the acquisition proc	ess.
Tester	csr	
Name:		
Test Host:	McGarrett	
Test Date:	Thu Aug 30 03:12:25 2012	
Drives:	<pre>src(43) dst (none) other (0F-FU)</pre>	
Source	src hash (SHA256): <	
Setup:	2658F47603DE6B1D883B64823E9733F578658D08D06A4BB8C05	
	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325	
	<pre>src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 78125000 total sectors (40000000000 bytes)</pre>	>
	Model (0BB-75JHC0) serial # (WD-WMAMC465	00)
	N Start LBA Length Start C/H/S End C/H/S bo	
	1 P 00000063 020980827 0000/001/01 1023/254/63	OC Fat32X
	2 X 020980890 057143205 1023/000/01 1023/254/63	0F extended
	3 S 00000063 000032067 1023/001/01 1023/254/63	01 Fat12
	4 x 000032130 002104515 1023/000/01 1023/254/63	05 extended
	5 S 00000063 002104452 1023/001/01 1023/254/63	06 Fat16
	6 x 002136645 004192965 1023/000/01 1023/254/63	05 extended
	7 S 00000063 004192902 1023/001/01 1023/254/63	16 other
	8 x 006329610 008401995 1023/000/01 1023/254/63	05 extended
	9 S 00000063 008401932 1023/001/01 1023/254/63	0B Fat32
	10 x 014731605 010490445 1023/000/01 1023/254/63	05 extended
	11 S 00000063 010490382 1023/001/01 1023/254/63	83 Linux
	12 x 025222050 004209030 1023/000/01 1023/254/63	05 extended
	13 S 00000063 004208967 1023/001/01 1023/254/63	82 Linux swap
	14 x 029431080 027712125 1023/000/01 1023/254/63	05 extended
	15 S 000000063 027712062 1023/001/01 1023/254/63	07 NTFS
	16 S 00000000 00000000 0000/000/00 0000/00/0	00 empty entry
	17 P 00000000 00000000 0000/00/00 0000/00/00	00 empty entry
	18 P 000000000 00000000 0000/000/00 0000/00/	00 empty entry
	1 020980827 sectors 10742183424 bytes	
	3 000032067 sectors 16418304 bytes	
	5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes	
	7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes	
	11 010490382 sectors 5371075584 bytes	
	13 004208967 sectors 2154991104 bytes	
	15 004208967 Sectors 2154991104 Bytes 15 027712062 sectors 14188575744 bytes	
	43swap-md5sum 2154991103 4B602964A30FE20D1B22B046A7	375870
	43swap-shalsum 2154991103 F5B062CC31DA088DF7FAF8F7A	
		-
Log	Teel Octoberge	
Highlights:	===== Tool Settings: =====	
	image size: 2GB	
	image format: E01	

	OS: Linux Paladin 3.2.0-23-generic-pae #36-Uk	ountu SMP Tue Apr 10 22:19:09
	UTC 2012 i686 i686 i386 GNU/Linux	
	===== Image file segments ======	
	1 32164591 Aug 30 05:15 da-07-swap.E01	
	2 2828 Aug 30 05:15 da-07-swap.log.	txt
	====== Excerpt from Tool log =======	
	Source Drive:	
	Model Number: WDC WD400BB-75JHC	0
	Serial Number: WD-WMAMC4658888	
	============ Hashes:	
	Hash values calculated during initial creation	
	Total (md5): ea8fea1fb95c0e05ed13dd42a57e8932	
	MD5 hash calculated over data: ea8fea1	109500005ed13dd42a57e8932
	SHA1 hash calculated over data: 18b73d892d772b88437ce0392e1732ca8fe2a	254
	======= End of Excerpt from Tool log ======	
	End OI Excerpt from foot tog	
	===== Source drive rebash =====	
	====== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A7	322810093F325065E5871
	====== Source drive rehash ====== Rehash (SHA1) of source: 888E2E7F7AD237DC7A7	32281DD93F325065E5871
Results:		32281DD93F325065E5871
Results:		32281DD93F325065E5871 Actual Result
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A7	_
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A7: Assertion & Expected Result	Actual Result
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A7: Assertion & Expected Result AM-01 Source acquired using interface AI.	Actual Result as expected
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A7: Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS.	Actual Result as expected as expected
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A7: Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE.	Actual Result as expected as expected as expected
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A7: Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system	Actual Result as expected as expected as expected
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A7: Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS.	Actual Result as expected as expected as expected as expected
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A7: Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired.	Actual Result as expected as expected as expected as expected as expected
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A7: Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired.	Actual Result as expected as expected as expected as expected as expected sexpected as expected
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A7Assertion & Expected ResultAM-01 Source acquired using interface AI.AM-02 Source is type DS.AM-03 Execution environment is XE.AM-05 An image is created on file systemtype FS.AM-06 All visible sectors acquired.AM-08 All sectors accurately acquired.	Actual Result as expected as expected as expected as expected seven sectors acquired as zeros
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A73 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate.	Actual Result as expected as expected as expected as expected as expected seven sectors acquired as zeros as expected
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A73Assertion & Expected ResultAM-01 Source acquired using interface AI.AM-02 Source is type DS.AM-03 Execution environment is XE.AM-05 An image is created on file system type FS.AM-06 All visible sectors acquired.AM-08 All sectors accurately acquired.AO-01 Image file is complete and accurate.AO-05 Multifile image created.	Actual Result as expected as expected
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A73Assertion & Expected ResultAM-01 Source acquired using interface AI.AM-02 Source is type DS.AM-03 Execution environment is XE.AM-05 An image is created on file system type FS.AM-06 All visible sectors acquired.AM-08 All sectors accurately acquired.AO-01 Image file is complete and accurate.AO-05 Multifile image created.AO-22 Tool calculates hashes by block.	Actual Resultas expectedas expectedas expectedas expectedas expectedseven sectors acquired as zerosas expectedas expectedoption not available
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A73Assertion & Expected ResultAM-01 Source acquired using interface AI.AM-02 Source is type DS.AM-03 Execution environment is XE.AM-05 An image is created on file systemtype FS.AM-06 All visible sectors acquired.AM-08 All sectors accurately acquired.AO-01 Image file is complete and accurate.AO-05 Multifile image created.AO-22 Tool calculates hashes by block.AO-23 Logged information is correct.	Actual Resultas expectedas expectedas expectedas expectedas expectedseven sectors acquired aszerosas expectedas expected
Results:	Rehash (SHA1) of source: 888E2E7F7AD237DC7A73Assertion & Expected ResultAM-01 Source acquired using interface AI.AM-02 Source is type DS.AM-03 Execution environment is XE.AM-05 An image is created on file systemtype FS.AM-06 All visible sectors acquired.AM-08 All sectors accurately acquired.AO-01 Image file is complete and accurate.AO-05 Multifile image created.AO-22 Tool calculates hashes by block.AO-23 Logged information is correct.	Actual Resultas expectedas expectedas expectedas expectedas expectedseven sectors acquired aszerosas expectedas expected

5.2.29 DA-07-THUMB

)7-THUMB Sumuri Paladin 3.0.0	
Case	DA-07 Acquire a digital source of type DS to an ima	ge file.
Summary:		
Assertions:	AM-01 The tool uses access interface SRC-AI to acce	ss the digital source.
	AM-02 The tool acquires digital source DS.	
	AM-03 The tool executes in execution environment XE	
	AM-05 If image file creation is specified, the tool	creates an image file
	on file system type FS.	
	AM-06 All visible sectors are acquired from the dig	ital source.
	AM-08 All sectors acquired from the digital source	
	AO-01 If the tool creates an image file, the data r	
	file is the same as the data acquired by the tool.	-F
	AO-05 If the tool creates a multi-file image of a r	equested size then all
	the individual files shall be no larger than the re	-
	A0-22 If requested, the tool calculates block hashe	-
	size during an acquisition for each block acquired	_
	AO-23 If the tool logs any log significant informat	
		ion, the information is
	accurately recorded in the log file.	
	A0-24 If the tool executes in a forensically safe e	
	the digital source is unchanged by the acquisition	process.
Tester Name:	csr	
Test Host:	McGarrett	
Test Date:	Tue Aug 28 20:28:28 2012	
Drives:	<pre>src(D5-thumb) dst (none) other (0F-FU)</pre>	
Source	src hash (SHA1): < D68520EF74A336E49DCCF83815B7B08F	
Setup:	<pre>src hash (MD5): < C843593624B2B3B878596D8760B19954</pre>	>
	505856 total sectors (258998272 bytes)	
	Model (usb2.0Flash Disk) serial # ()	
-		
Log		
Highlights:	===== Tool Settings: =====	
	image size: 2GB	
	image format: dd	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu S	MP Tue Apr 10 22:19:09
	UTC 2012 i686 i686 i386 GNU/Linux	
	===== Image file segments ======	
	====== 1mage file segments ====== 1 258998272 Aug 28 20:45 da-07-thumb.001	
	1 258998272 Aug 28 20:45 da-07-thumb.001	
	1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt	
	1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log =======	0000000000000 258MB
	1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive:	000000000C0D 258MB
	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda)</pre>	000000000C0D 258MB
	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ============ Hashes:</pre>	000000000C0D 258MB
	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ====== Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ========== Hashes: Hash values calculated during initial creation:</pre>	000000000C0D 258MB
	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ====== Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ========== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954</pre>	
	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ====== Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ========== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (shal): d68520ef74a336e49dccf83815b7b08fdc53e</pre>	
	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ====== Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ========== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954</pre>	
	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ====== Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ========== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (sha1): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======</pre>	
	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ====== Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (shal): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= ===== Source drive rehash ======</pre>	38a
	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ====== Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ========== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (sha1): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======</pre>	38a
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ====== Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (shal): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= ===== Source drive rehash ======</pre>	38a
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ======= Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (shal): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= ===== Source drive rehash ====== Rehash (SHA1) of source: D68520EF74A336E49DCCF83815</pre>	38a
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (shal): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= e==== Source drive rehash ====== Rehash (SHA1) of source: D68520EF74A336E49DCCF83815</pre>	38a B7B08FDC53E38A Actual Result
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (shal): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: D68520EF74A336E49DCCF83815</pre>	38a B7B08FDC53E38A Actual Result as expected
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ========== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (shal): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: D68520EF74A336E49DCCF83815</pre>	38a B7B08FDC53E38A Actual Result as expected as expected
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ====== Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (shal): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: D68520EF74A336E49DCCF83815</pre>	38a B7B08FDC53E38A Actual Result as expected as expected as expected as expected
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ========= Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (sha1): d68520ef74a336e49dccf83815b7b08fdc53e ====== End of Excerpt from Tool log ======= Rehash (SHA1) of source: D68520EF74A336E49DCCF83815 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS.</pre>	38a B7B08FDC53E38A Actual Result as expected as expected as expected as expected as expected
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (shal): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: D68520EF74A336E49DCCF83815 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired.</pre>	38a B7B08FDC53E38A Actual Result as expected as expected as expected as expected as expected as expected
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (shal): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: D68520EF74A336E49DCCF83815 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired.</pre>	38a B7B08FDC53E38A Actual Result as expected as expected as expected as expected as expected as expected as expected as expected
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (sha1): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: D68520EF74A336E49DCCF83815 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate.</pre>	38a B7B08FDC53E38A Actual Result as expected as expected as expected as expected as expected as expected
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (sha1): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: D68520EF74A336E49DCCF83815 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created.</pre>	38a B7B08FDC53E38A Actual Result as expected as expected as expected as expected as expected as expected as expected as expected
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (sha1): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: D68520EF74A336E49DCCF83815 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate.</pre>	38a B7B08FDC53E38A Actual Result as expected as expected as expected as expected as expected as expected as expected as expected as expected
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (sha1): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: D68520EF74A336E49DCCF83815 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created. AO-22 Tool calculates hashes by block.</pre>	38a B7B08FDC53E38A Actual Result as expected as expected
Results:	<pre>1 258998272 Aug 28 20:45 da-07-thumb.001 2 833 Aug 28 20:45 da-07-thumb.log.txt ====== Excerpt from Tool log ======= Source Drive: Source Physical device CRUCIAL usb2.0Flash Disk 104 (/dev/sda) ======== Hashes: Hash values calculated during initial creation: Total (md5): c843593624b2b3b878596d8760b19954 Total (sha1): d68520ef74a336e49dccf83815b7b08fdc53e ======= End of Excerpt from Tool log ======= Rehash (SHA1) of source: D68520EF74A336E49DCCF83815 Assertion & Expected Result AM-01 Source acquired using interface AI. AM-02 Source is type DS. AM-03 Execution environment is XE. AM-05 An image is created on file system type FS. AM-06 All visible sectors acquired. AM-08 All sectors accurately acquired. AO-01 Image file is complete and accurate. AO-05 Multifile image created.</pre>	38a B7B08FDC53E38A Actual Result as expected as expected as expected as expected as expected as expected as expected as expected as expected as expected

Test Case DA-07-THUMB Sumuri Paladin 3.0.0		
Analysis:	Expected results achieved	

5.2.30 DA-09

Test Case DA	-09 Sumuri Paladin 3.0.0
Case	DA-09 Acquire a digital source that has at least one faulty data sector.
Summary:	
Assertions:	 AM-01 The tool uses access interface SRC-AI to access the digital source. AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool creates an image file on file system type FS. AM-06 All visible sectors are acquired from the digital source. AM-08 All sectors acquired from the digital source are acquired accurately. AM-09 If unresolved errors occur while reading from the selected digital source, the tool notifies the user of the error type and location within the digital source, the tool uses a benign fill in the destination object in place of the inaccessible data. AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool. AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size. AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file. AO-24 If the tool executes in a forensically safe execution environment, the
Tester	digital source is unchanged by the acquisition process.
Name:	
Test Host:	frank
Test Date:	Thu Sep 6 09:30:38 2012
Drives:	src(ED-BAD-CPR4) dst (04-SATA) other (none) No before hash for ED-BAD-CPR4
Source Setup:	NO DEFORE HUSH FOL FD-DAD-CLK4
±	Known Bad Sector List for ED-BAD-CPR4 Manufacturer: Maxtor
	Model: DiamondMax Plus 9
	Serial Number: Y23EGSJE
	Capacity: 60GB Interface: SATA
	35 faulty sectors
	6160328, 6160362, 10041157, 10041995, 10118634, 10209448, 11256569, 14115689, 14778391, 14778392, 14778449, 14778479, 14778517, 14778518, 14778519, 14778520, 14778521, 14778551, 14778607, 14778626, 14778627, 14778650, 14778668, 14778669, 14778709, 14778727, 14778747, 14778772, 14778781, 14778870, 14778949, 14778953, 14779038, 14779113, 14779321
Log Highlights:	===== Destination drive setup ===== 156301488 sectors wiped with 4
	<pre>===== Comparison of original to clone drive ===== Sectors compared: 120103200 Sectors match: 6160328 Sectors differ: 113942872 Bytes differ: 735660040 Diffs range 6160328-120103199 Source (120103200) has 36198288 fewer sectors than destination (156301488) Zero fill: 24 Src Byte fill (ED): 520 Dst Byte fill (04): 36197744 Other fill: 0 Other no fill: 0 Zero fill range: 120103720-120103743 Src fill range: 120103200-120103719 Dst fill range: 120103744-156301487</pre>

Test Case DA	-09 Sumuri Paladin 3.0.0
TODE Cabe Di	Other fill range:
	Other not filled range:
	0 source read errors, 0 destination read errors
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09
	UTC 2012 i686 i686 i386 GNU/Linux
	====== Excerpt from Tool log =======
	Source Drive:
	Model Number: Maxtor 6Y060M0
	Serial Number: Y23EGSJE
	dcfldd:/dev/sda: Input/output error
	96255+1 records in
	96256+0 records out
	dcfldd:/dev/sda: Input/output error
	156891+3 records in
	156894+0 records out
	dcfldd:/dev/sda: Input/output error 156903+5 records in
	156908+0 records out
	dcfldd:/dev/sda: Input/output error
	158099+7 records in
	158106+0 records out
	dcfldd:/dev/sda: Input/output error
	159517+8 records in
	159525+0 records out
	dcfldd:/dev/sda: Input/output error
	175877+10 records in
	175887+0 records out
	dcfldd:/dev/sda: Input/output error
	220549+12 records in
	220561+0 records out
	dcfldd:/dev/sda: Input/output error
	230902+14 records in 230916+0 records out
	dcfldd:/dev/sda: Input/output error
	230902+15 records in
	230917+0 records out
	dcfldd:/dev/sda: Input/output error
	230902+16 records in
	230918+0 records out
	dcfldd:/dev/sda: Input/output error
	230902+18 records in
	230920+0 records out
	dofldd:/dev/sda: Input/output error
	230902+19 records in
	230921+0 records out dcfldd:/dev/sda: Input/output error
	230902+21 records in
	230922+21 records in 230923+0 records out
	dcfldd:/dev/sda: Input/output error
	230902+23 records in
	230925+0 records out
	dcfldd:/dev/sda: Input/output error
	230902+25 records in
	230927+0 records out
	dcfldd:/dev/sda: Input/output error
	230902+27 records in
	230929+0 records out
	dcfldd:/dev/sda: Input/output error 230902+29 records in
	230902+29 records in 230931+0 records out
	dcfldd:/dev/sda: Input/output error
	230904+31 records in
	230935+0 records out
	1876588+33 records in
	1876621+0 records out
	======== Hashes:
	Hash values calculated during initial creation:
	Total (md5): 578d7769b79d58968435b062cfd79d3a

	Total (shal): 613d86cf602ad592d4e839e174e2dcef83fa6 ======= End of Excerpt from Tool log =======	ba4
Results:		
	Assertion & Expected Result	Actual Result
	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	some sectors skipped
	AM-08 All sectors accurately acquired.	some sectors differ
	AM-09 Error logged.	as expected
	AM-10 Benign fill replaces inaccessible sectors.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	not checked

5.2.31 DA-12

Test Case DA-	12 Sumuri Paladin 3.0.0	
Case Summary:	DA-12 Attempt to create an image file where there is	s insufficient space.
Assertions:	AM-01 The tool uses access interface SRC-AI to acces AM-02 The tool acquires digital source DS. AM-03 The tool executes in execution environment XE. AM-05 If image file creation is specified, the tool file system type FS. AO-04 If the tool is creating an image file and ther on the image destination device to contain the image notify the user. AO-23 If the tool logs any log significant informati accurately recorded in the log file. AO-24 If the tool executes in a forensically safe ex digital source is unchanged by the acquisition proce	creates an image file on re is insufficient space e file, the tool shall ion, the information is recution environment, the
Tester Name:	csr	
Test Host:	McGarrett	
Test Date:	Tue Aug 28 21:27:39 2012	
Drives:	src(07-sata) dst (none) other (6f)	
Source	src hash (SHA256): <	
Setup:	CE65C4A3C3164D3EBAD58D33BB2415D29E260E1F88DC5A131B1C src hash (SHA1): < 655E9BDDB36A3F9C5C4CC8BF32B8C5B41 src hash (MD5): < 2EAF712DAD80F66E30DEA00365B4579B 156301488 total sectors (80026361856 bytes) Model (WDC WD800JD-32HK) serial # (WD-WMAJ91510044) N Start LBA Length Start C/H/S End C/H/S boo 1 P 000000063 156280257 0000/001/01 1023/254/63 Boo 2 P 00000000 00000000 0000/000/00 0000/000/00 3 P 00000000 00000000 0000/000/00 0000/000/00 4 P 00000000 00000000 0000/000/00 0000/000/00 1 156280257 sectors 80015491584 bytes	LAF9F52E > > Dt Partition type
Highlights:	<pre>====== Tool Settings: ====== image size: 2GB image format: dd OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SN UTC 2012 i686 i686 i386 GNU/Linux ====== Image file segments ====== 1 2097152000 da-12.001</pre>	MP Tue Apr 10 22:19:09
	2 2097152000 da-12.002 3 2097152000 da-12.003 27 2097152000 da-12.027 28 2097152000 da-12.028 29 1611894784 da-12.029	
	======================================	
	<pre>====== Excerpt from Tool log ======= Source Drive: Model Number: WDC WD800JD-32HKA0 Serial Number: WD-WMAJ91510044 ======== Hashes: Hash values calculated during initial creation: ====== End of Excerpt from Tool log ======= ===== Source drive rehash ====== Rehash (SHA1) of source: 655E9BDDB36A3F9C5C4CC8BF32E</pre>	38C5B41AF9F52E
Results:	Assertion & Expected Result	Actual Result

	AM-01 Source acquired using interface AI.	as expected
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AO-04 User notified if space exhausted.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.32 DA-14-ATA28

Test Case DA-	14-ATA28 Sumuri Paladin 3.0.0		
Case	DA-14 Create an unaligned clone from an image	file.	
Summary:			
Assertions:	AM-03 The tool executes in execution environme	nt XE.	
	AO-12 If requested, a clone is created from an	image file.	
	AO-13 A clone is created using access interfac	e DST-AI to write	to the
	clone device.		
	AO-14 If an unaligned clone is created, each s		
	accurately written to the same disk address on	the clone that the	ne sector
	occupied on the digital source.		
	AO-17 If requested, any excess sectors on a cl not modified.	one destination de	evice are
	AO-23 If the tool logs any log significant inf	ormation the inf	ormation is
	accurately recorded in the log file.		JIMACION IS
	accuracely recorded in the roy rife.		
Tester	csr		
Name:			
Test Host:	McGarrett		
Test Date:	Wed Sep 5 01:40:02 2012		
Drives:	<pre>src(12-IDE) dst (54-SATA) other (38-SATA)</pre>		
Source	<pre>src hash (SHA1): < 10DC1439E56093FFA6F11E10442</pre>		
Setup:	<pre>src hash (MD5): < ACAFB6838330FD24221199512A6</pre>	1D565 >	
	234441648 total sectors (120034123776 bytes)		
	14592/254/63 (max cyl/hd values)		
	14593/255/63 (number of cyl/hd)		
	Model (00JB-00REA0) serial # (WD-WCANMD0605)		
Loq	====== Destination drive setup ======		
Highlights:	312581808 sectors wiped with 54		
ing gift gifteb .	Sizsoiooo beecoib wipea wien Si		
	====== Comparison of original to clone drive =	=====	
	Sectors compared: 234441648		
	Sectors match: 234441648		
	Sectors differ: 0		
	Bytes differ: 0		
	Diffs range		
	Source (312581808) has 78140160 more sectors t		234441648)
	0 source read errors, 0 destination read errors		
	OS: Linux Dolodin 2 2 0-22 generia-poo #26 libuntu SMD Tuo Apr 10 22:10:00		
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux		
	01C 2012 1080 1080 1380 GN0/Linux		
	======= Excerpt from Tool log =======		
	================= Hashes:		
	Digest hash information		
	MD5: acafb6838330fd24221199512a61d565		
	SHA1: 10dc1439e56093ffa6f11e10442106f27d899f67		
	Hash values calculated during initial creation:		
	Total (md5): acafb6838330fd24221199512a61d565		
	Total (shal): 10dc1439e56093ffa6f11e10442106f2		
	====== End of Excerpt from Tool log =======		
Results:			
TODATOD.	Assertion & Expected Result	Actual Result	
	AM-03 Execution environment is XE.	as expected	
	AO-12 A clone is created from an image file.	as expected	
	AO-13 Clone created using interface AI.	as expected	
	A0-14 An unaligned clone is created.	as expected	
	A0-17 Excess sectors are unchanged.	as expected	
	A0-23 Logged information is correct.	as expected	
		onpecced	
Analysis:	Expected results achieved		
-	. –		

5.2.33 DA-14-ATA48

Test Case DA-	14-ATA48 Sumuri Paladin 3.0.0	
Case	DA-14 Create an unaligned clone from an image	file.
Summary:	5	
Assertions:	AM-03 The tool executes in execution environme	nt XE.
	AO-12 If requested, a clone is created from an	image file.
	AO-13 A clone is created using access interfac	e DST-AI to write to the
	clone device.	
	AO-14 If an unaligned clone is created, each s	
	accurately written to the same disk address on the clone that the se occupied on the digital source. AO-17 If requested, any excess sectors on a clone destination device not modified.	
		ormation the information is
	AO-23 If the tool logs any log significant information, the informatic accurately recorded in the log file.	
Tester Name:	csr	
Test Host:	McGarrett	
Test Date:	Tue Sep 4 23:11:02 2012	
Drives:	src(4E) dst (32-IDE) other (38-SATA)	
Source	<pre>src hash (SHA1): < 7DDFF1A74B2E2B7E7EE43C41CD9</pre>	066E27986644D >
Setup:	<pre>src hash (MD5): < 62C9436930204E0F38921771ACA</pre>	1BB88 >
	488397168 total sectors (250059350016 bytes)	
	30400/254/63 (max cyl/hd values)	
	30401/255/63 (number of cyl/hd)	
	IDE disk: Model (WDC WD2500JB-22FUA0) serial # (WD-WMAEP1925256)	
	N Start LBA Length Start C/H/S End C/H/S	
	1 P 00000063 488375937 0000/001/01 1023/254/	
	2 P 00000000 0000000 0000/00/00 000/00/ 3 P 00000000 0000000 0000/00/00 0000/00/	
	4 P 00000000 00000000 0000/000/00 0000/000/	
	1 488375937 sectors 250048479744 bytes	00 00 empty entry
Log	===== Destination drive setup ======	
Highlights:	488397168 sectors wiped with 32	
	===== Comparison of original to clone drive =	=====
	Sectors compared: 488397168	
	Sectors match: 488397168	
	Sectors differ: 0 Bytes differ: 0	
Diffs range 0 source read errors, 0 destination read errors		C
	o source read errors, o descritación read error	5
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09	
	UTC 2012 i686 i686 i386 GNU/Linux	
	====== Excerpt from Tool log =======	
	============= Hashes:	
	Hash values calculated during initial creation	:
	Total (md5): 62c9436930204e0f38921771aca1bb88	
	Total (shal): 7ddffla74b2e2b7e7ee43c41cd9066e2	
	====== End of Excerpt from Tool log =======	
Desults		
Results:	Aggertion & Exposted Perult	Actual Poquit
	Assertion & Expected Result	Actual Result
	AM-03 Execution environment is XE.	as expected
	AO-12 A clone is created from an image file. AO-13 Clone created using interface AI.	as expected
	AUTIS CIONE CREALED USING INTERIACE AL.	as expected
		ad amported
	AO-14 An unaligned clone is created.	as expected
	AO-14 An unaligned clone is created. AO-17 Excess sectors are unchanged.	as expected
	AO-14 An unaligned clone is created.	
	AO-14 An unaligned clone is created. AO-17 Excess sectors are unchanged.	as expected

5.2.34 DA-14-CF

Case	14-CF Sumuri Paladin 3.0.0 DA-14 Create an unaligned clone from an image	file	
Summary:	DA-IT CLEACE AN UNALLYNED CLONE LLOW AN IMAGE		
Assertions:	AM-03 The tool executes in execution environme	nt XE.	
	AO-12 If requested, a clone is created from an	image file.	
	AO-13 A clone is created using access interfac	-	
	device.		
	AO-14 If an unaligned clone is created, each s	ector written to the clone i	
	accurately written to the same disk address on		
	occupied on the digital source.		
	AO-17 If requested, any excess sectors on a cl	one destination device are n	
	modified.		
	AO-23 If the tool logs any log significant inf	ormation, the information is	
	accurately recorded in the log file.		
Tester Name:	csr		
Test Host:	McGarrett		
Test Date:	Wed Aug 29 22:44:00 2012		
Drives:	src(C1-CF) dst (C2-CF) other (OF-FU)		
Source	src hash (SHA256): <		
Setup:	C7CF0218222DF80D5316511D6814266C7FA507C13F795A	N0000 - 00000000000000000000000	
Secup.	src hash (SHA1): < 5B8235178DF99FA307430C088F8		
	<pre>src hash (MD5): < 776DF8B4D2589E21DEBCF589EDC16D78 > 502000 total system; (257040606 hotes)</pre>		
	503808 total sectors (257949696 bytes) Model (CF) serial # ()		
	, , , , , ,	boot Dartition tors	
		boot Partition type	
	1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other		
	2 P 168689522 1936028240 0288/115/43 0367/114		
	3 P 1869881465 1936028192 0366/032/33 0357/03	,	
	4 P 2885681152 000055499 0372/097/50 0000/010/00 Boot 0D other		
	1 1141509631 sectors 584452931072 bytes		
	2 1936028240 sectors 991246458880 bytes		
	3 1936028192 sectors 991246434304 bytes		
	4 000055499 sectors 28415488 bytes		
Log	====== Destination drive setup ======		
Highlights:	503808 sectors wiped with C2		
1129112291100	Sobood Scotors wiped with of		
	====== Comparison of original to clone drive =	=====	
	Sectors compared: 503808		
	Sectors match: 503808		
	Sectors differ: 0		
	Bytes differ: 0		
	Diffs range		
	0 source read errors, 0 destination read errors		
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubu	ntu SMD Tue Apr 10 22.10.00	
	UTC 2012 i686 i686 i386 GNU/Linux	nea Dur Ine Apt IO 22.19.09	
	515 2012 1000 1000 1500 GNO/ HIMA		
	====== Excerpt from Tool log =======		
	======================================		
	Hash values calculated during initial creation	:	
	Total (md5): 776df8b4d2589e21debcf589edc16d78		
	Total (shal): 5b8235178df99fa307430c088f817466	06638a0b	
	====== End of Excerpt from Tool log =======		
	2.14 01 2.1001 F0 1101 109		
Results:		Actual Result	
Results:	Assertion & Expected Result	Actual Result	
Results:	AM-03 Execution environment is XE.	as expected	
Results:			
Results:	AM-03 Execution environment is XE. AO-12 A clone is created from an image file.	as expected as expected	
Results:	AM-03 Execution environment is XE. AO-12 A clone is created from an image file. AO-13 Clone created using interface AI.	as expected as expected as expected	
Results:	AM-03 Execution environment is XE. AO-12 A clone is created from an image file. AO-13 Clone created using interface AI. AO-14 An unaligned clone is created.	as expected as expected as expected as expected	
Results:	AM-03 Execution environment is XE. AO-12 A clone is created from an image file. AO-13 Clone created using interface AI. AO-14 An unaligned clone is created. AO-17 Excess sectors are unchanged.	as expected as expected as expected as expected as expected	
Results:	AM-03 Execution environment is XE. AO-12 A clone is created from an image file. AO-13 Clone created using interface AI. AO-14 An unaligned clone is created.	as expected as expected as expected as expected	
Results:	AM-03 Execution environment is XE. AO-12 A clone is created from an image file. AO-13 Clone created using interface AI. AO-14 An unaligned clone is created. AO-17 Excess sectors are unchanged.	as expected as expected as expected as expected as expected	

5.2.35 DA-14-FW

14-FW Sumuri Paladin 3.0.0
DA-14 Create an unaligned clone from an image file.
AM-03 The tool executes in execution environment XE. AO-12 If requested, a clone is created from an image file. AO-13 A clone is created using access interface DST-AI to write to the clone device. AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source. AO-17 If requested, any excess sectors on a clone destination device are not modified. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.
jrr
Scimitar
Thu Aug 30 10:16:31 2012
src(63-FU2) dst (04-SATA) other (OC-FU)
<pre>src hash (SHA256): < EC8EF011494BA6DA18F74C47547C3E74E7180585096A830F9247A98EF613BB1D > src hash (SHA1): < F7069EDCBEAC863C88DECED82159F22DA96BE99B > src hash (MD5): < EE217BC4FA4F3D1B4021D29B065AA9EC > 117304992 total sectors (60060155904 bytes) Model (SP0612N) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 004192902 0000/001/01 0260/254/63 Boot 06 Fat16 2 x 004192965 113097600 0261/000/01 1023/254/63 OF extended 3 S 00000063 113097537 0261/001/01 1023/254/63 OB Fat32 4 S 00000000 00000000 0000/000/00 0000/000 00</pre>
<pre>===== Destination drive setup ====== 156301488 sectors wiped with 4 ====== Comparison of original to clone drive ====== Sectors compared: 117304992 Sectors match: 117304992 Sectors differ: 0 Bytes differ: 0 Diffs range Source (117304992) has 38996496 fewer sectors than destination (156301488) Zero fill: 0 Diffs range Source (117304992) has 38996496 fewer sectors than destination (156301488) Zero fill: 0 Dst Byte fill (63): 0 Dst Byte fill (63): 0 Dst Byte fill (04): 38996496 Other fill: 0 Zero fill range: Src fill range: Src fill range: Dst fill range: 117304992-156301487 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux ====================================</pre>

	====== End of Excerpt from Tool log =======	
Results:	Assertion & Expected Result	Actual Result
	AM-03 Execution environment is XE.	as expected
	AO-12 A clone is created from an image file.	as expected
	AO-13 Clone created using interface AI.	as expected
	AO-14 An unaligned clone is created.	as expected
	AO-17 Excess sectors are unchanged.	as expected
	AO-23 Logged information is correct.	as expected

5.2.36 DA-14-SATA28

	-14-SATA28 Sumuri Paladin 3.0.0 DA-14 Create an unaligned clone from an image	file
Case Summary:	DA-14 Create an unarryned crone from an image	1116.
Assertions:	AM-03 The tool executes in execution environme	nt VE
Assertions.		
	AO-12 If requested, a clone is created from an	-
	AO-13 A clone is created using access interfac	e DST-AI to write to the clone
	device.	
	AO-14 If an unaligned clone is created, each s	ector written to the clone is
	accurately written to the same disk address on	the clone that the sector
	occupied on the digital source.	
	AO-17 If requested, any excess sectors on a cl	one destination device are not
	modified.	one descination device are not
		aumatian the information is
	AO-23 If the tool logs any log significant inf	ormation, the information is
	accurately recorded in the log file.	
m	+	
Tester	jrr	
Name:		
Test Host:	Scimitar	
Test Date:	Fri Aug 31 10:28:26 2012	
Drives:	<pre>src(07-SATA) dst (05-SATA) other (OC-FU)</pre>	
Source	<pre>src hash (SHA256): <</pre>	
Setup:	CE65C4A3C3164D3EBAD58D33BB2415D29E260E1F88DC5A	131B1C4C9C2945B8A9 >
Secup.	src hash (SHA1): < 655E9BDDB36A3F9C5C4CC8BF32B	
	src hash (MD5): < 2EAF712DAD80F66E30DEA00365B	40/JB >
	156301488 total sectors (80026361856 bytes)	0044
	Model (WDC WD800JD-32HK) serial # (WD-WMAJ9151	
	N Start LBA Length Start C/H/S End C/H/S	boot Partition type
	1 P 000000063 156280257 0000/001/01 1023/254/	63 Boot 07 NTFS
	2 P 00000000 0000000 0000/000/00 0000/000/	00 00 empty entry
	3 P 00000000 0000000 0000/000/00 0000/000/	
	4 P 00000000 00000000 0000/000/00 0000/000/	00 00 empty entry
		oo capey chery
	1 156280257 sectors 80015491584 bytes	
Tee	Destination duine estur	
Log	===== Destination drive setup ======	
Highlights:	156301488 sectors wiped with 5	
	====== Comparison of original to clone drive =	=====
	Sectors compared: 156301488	
	Sectors match: 156301488	
	Sectors differ: 0	
	Bytes differ: 0	
	Diffs range	
	0 source read errors, 0 destination read errors	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubu	ntu SMP Tue Apr 10 22:19:09
	UTC 2012 i686 i686 i386 GNU/Linux	
	====== Excerpt from Tool log =======	
	================= Hashes:	
	Digest hash information	201
		30dea00365b4579b
		5c4cc8bf32b8c5b41af9f52e
	Hash values calculated during initial creation	:
	Total (md5): 2eaf712dad80f66e30dea00365b4579b	
	Total (sha1): 655e9bddb36a3f9c5c4cc8bf32b8c5b4	laf9f52e
	====== End of Excerpt from Tool log =======	
Results:		
	Assertion & Expected Result	Actual Result
	AM-03 Execution environment is XE.	as expected
	AO-12 A clone is created from an image file.	as expected
	AO-13 Clone created using interface AI.	as expected
	AO-14 An unaligned clone is created.	as expected
	AO-17 Excess sectors are unchanged.	as expected
	AO-23 Logged information is correct.	as expected
Analysis:	Expected results achieved	

5.2.37 DA-14-SATA48

Test Case DA-	14-SATA48 Sumuri Paladin 3.0.0		
Case	DA-14 Create an unaligned clone from an image	file.	
Summary:			
Assertions:	AM-03 The tool executes in execution environme	nt XE.	
	AO-12 If requested, a clone is created from an	-	
	AO-13 A clone is created using access interfac	e DST-AI to write to the	
	clone device.		
	AO-14 If an unaligned clone is created, each s		
	accurately written to the same disk address on	the clone that the sector	
	occupied on the digital source. AO-17 If requested, any excess sectors on a cl	one destination device are	
	not modified.		
	AO-23 If the tool logs any log significant inf	ormation, the information is	
	accurately recorded in the log file.		
Tester Name:	jrr		
Test Host:	Scimitar		
Test Date:	Wed Sep 5 15:04:44 2012		
Drives:	<pre>src(0D-SATA) dst (33-IDE) other (OC-FU)</pre>		
Source	<pre>src hash (SHA1): < BAAD80E8781E55F2E3EF528CA73</pre>		
Setup:	<pre>src hash (MD5): < 1FA7C3CBE60EB9E89863DED2411</pre>	E40C9 >	
	488397168 total sectors (250059350016 bytes)		
	30400/254/63 (max cyl/hd values) 30401/255/63 (number of cyl/hd)		
	Model (WDC WD2500JD-22F) serial # (WD-WMAEH267	8216)	
		boot Partition type	
	1 P 000000063 488375937 0000/001/01 1023/254/		
	2 P 00000000 00000000 0000/001/01 1023/234/		
	3 P 00000000 00000000 0000/000/00 0000/000/		
	4 P 00000000 00000000 0000/000/00 0000/000/		
	1 488375937 sectors 250048479744 bytes		
Log	====== Destination drive setup ======		
Highlights:	488397168 sectors wiped with 33		
	Company of animal to along heine		
	====== Comparison of original to clone drive = Sectors compared: 488397168	=====	
	Sectors match: 488397168		
	Sectors differ: 0		
	Bytes differ: 0		
	Diffs range		
	0 source read errors, 0 destination read errors		
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09		
	UTC 2012 i686 i686 i386 GNU/Linux		
	====== Excerpt from Tool log =======		
	======================================		
	Total (md5): 1fa7c3cbe60eb9e89863ded2411e40c9	•	
	Total (shal): baad80e8781e55f2e3ef528ca73bd41d	228c1377	
	====== End of Excerpt from Tool log =======		
Results:			
	Assertion & Expected Result	Actual Result	
	AM-03 Execution environment is XE.	as expected	
	AO-12 A clone is created from an image file.	as expected	
	AO-13 Clone created using interface AI.	as expected	
	AO-14 An unaligned clone is created.	as expected	
	A0-17 Excess sectors are unchanged.	as expected	
	AO-23 Logged information is correct.	as expected	
Analysis:	Expected results achieved		

5.2.38 DA-14-SCSI

Case Summary:DA-14 Create an unaligned clone from an image f Summary:Assertions:AM-03 The tool executes in execution environmen A0-12 If requested, a clone is created from an A0-13 A clone is created using access interface clone device.AO-14 If an unaligned clone is created, each se accurately written to the same disk address on occupied on the digital source. A0-17 If requested, any excess sectors on a clo not modified. A0-23 If the tool logs any log significant info accurately recorded in the log file.TesterjrrName:jrrTest Host:frankTest Date:Fri Aug 31 15:00:31 2012Drives:src(E0) dst (31-IDE) other (OF-FU)Sourcesrc hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7Setup:src hash (MD5): < A97C8F36B7AC9D5233B90AC0928417938985 total sectors (9184760320 bytes) Model (ATLAS10K2-TY092J) serial # (169028142436Log====== Destination drive setup ======	ht XE. image file. p DST-AI to write to the ector written to the clone is the clone that the sector one destination device are prmation, the information is VFA6158BECB82 >		
Assertions:AM-03 The tool executes in execution environmen A0-12 If requested, a clone is created from an A0-13 A clone is created using access interface clone device. A0-14 If an unaligned clone is created, each se accurately written to the same disk address on occupied on the digital source. A0-17 If requested, any excess sectors on a clon not modified. A0-23 If the tool logs any log significant info accurately recorded in the log file.Tester Name:jrrTest Host:frankTest Date:Fri Aug 31 15:00:31 2012Drives:src(E0) dst (31-IDE) other (OF-FU)Source Setup:src hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7 src hash (MD5): < A97C8F36B7AC9D5233B90AC09284 17938985 total sectors (9184760320 bytes) Model (ATLAS10K2-TY092J) serial # (169028142436)Log====== Destination drive setup ======	<pre>image file. c DST-AI to write to the ector written to the clone is the clone that the sector one destination device are prmation, the information is //FA6158BECB82 ></pre>		
AO-12 If requested, a clone is created from an AO-13 A clone is created using access interface clone device. AO-14 If an unaligned clone is created, each se accurately written to the same disk address on occupied on the digital source. AO-17 If requested, any excess sectors on a clon not modified. AO-23 If the tool logs any log significant info accurately recorded in the log file.Tester Name:jrrTest Host:frankTest Date:Fri Aug 31 15:00:31 2012Drives:src(E0) dst (31-IDE) other (OF-FU)Source Setup:src hash (MD5): < A97C8F36B7AC9D5233B90AC09284 17938985 total sectors (9184760320 bytes) Model (ATLAS10K2-TY092J) serial # (169028142436)Log====== Destination drive setup ======	<pre>image file. c DST-AI to write to the ector written to the clone is the clone that the sector one destination device are prmation, the information is //FA6158BECB82 ></pre>		
A0-13 A clone is created using access interface clone device. A0-14 If an unaligned clone is created, each se accurately written to the same disk address on occupied on the digital source. A0-17 If requested, any excess sectors on a clon not modified. A0-23 If the tool logs any log significant info accurately recorded in the log file.Tester Name:jrrTest Host:frankTest Date:Fri Aug 31 15:00:31 2012Drives:src(E0) dst (31-IDE) other (OF-FU)Source Setup:src hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7 src hash (MD5): < A97C8F36B7AC9D5233B90AC09284 17938985 total sectors (9184760320 bytes) Model (ATLAS10K2-TY092J) serial # (169028142436)Log====== Destination drive setup ======	2 DST-AI to write to the ector written to the clone is the clone that the sector one destination device are prmation, the information is 7FA6158BECB82 >		
clone device.AO-14 If an unaligned clone is created, each set accurately written to the same disk address on occupied on the digital source.AO-17 If requested, any excess sectors on a clon not modified.AO-23 If the tool logs any log significant info accurately recorded in the log file.TesterjrrName:Test Host:frankTest Date:Fri Aug 31 15:00:31 2012Drives:SourceSet up:Src hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7 Setup:Source Src hash (MD5): < A97C8F36B7AC9D5233B90AC09284 17938985 total sectors (9184760320 bytes) Model (ATLAS10K2-TY092J) serial # (169028142436)Log	ector written to the clone is the clone that the sector one destination device are prmation, the information is 7FA6158BECB82 >		
AO-14 If an unaligned clone is created, each se accurately written to the same disk address on occupied on the digital source. AO-17 If requested, any excess sectors on a clon not modified. AO-23 If the tool logs any log significant info accurately recorded in the log file.TesterjrrName:jrrTest Host:frankTest Date:Fri Aug 31 15:00:31 2012Drives:src(E0) dst (31-IDE) other (OF-FU)Sourcesrc hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7	the clone that the sector one destination device are prmation, the information is 7FA6158BECB82 >		
accurately written to the same disk address on occupied on the digital source. AO-17 If requested, any excess sectors on a clop not modified. AO-23 If the tool logs any log significant info accurately recorded in the log file.TesterjrrName:jrrTest Host:frankTest Date:Fri Aug 31 15:00:31 2012Drives:src(E0) dst (31-IDE) other (OF-FU)Sourcesrc hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7	the clone that the sector one destination device are prmation, the information is 7FA6158BECB82 >		
occupied on the digital source.AO-17 If requested, any excess sectors on a clopnot modified.AO-23 If the tool logs any log significant infoaccurately recorded in the log file.TesterjrrName:Test Host:frankTest Date:Fri Aug 31 15:00:31 2012Drives:src(E0) dst (31-IDE) other (OF-FU)SourceSetup:src hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7	one destination device are ormation, the information is //FA6158BECB82 >		
AO-17 If requested, any excess sectors on a clonot modified. AO-23 If the tool logs any log significant info accurately recorded in the log file.TesterjrrName:inthe log file.Test Host:frankTest Date:Fri Aug 31 15:00:31 2012Drives:src(E0) dst (31-IDE) other (OF-FU)Sourcesrc hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7	Praction, the information is		
not modified. AO-23 If the tool logs any log significant info accurately recorded in the log file.TesterjrrName:jrrTest Host:frankTest Date:Fri Aug 31 15:00:31 2012Drives:src(E0) dst (31-IDE) other (OF-FU)Sourcesrc hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7	Praction, the information is		
not modified. AO-23 If the tool logs any log significant info accurately recorded in the log file.TesterjrrName:jrrTest Host:frankTest Date:Fri Aug 31 15:00:31 2012Drives:src(E0) dst (31-IDE) other (OF-FU)Sourcesrc hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7	Praction, the information is		
AO-23 If the tool logs any log significant info accurately recorded in the log file.TesterjrrName:	/FA6158BECB82 >		
accurately recorded in the log file.TesterjrrName:	/FA6158BECB82 >		
Name:			
Test Host: frank Test Date: Fri Aug 31 15:00:31 2012 Drives: src(E0) dst (31-IDE) other (OF-FU) Source src hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7 Setup: src hash (MD5): < A97C8F36B7AC9D5233B90AC09284 17938985 total sectors (9184760320 bytes) Model (ATLAS10K2-TY092J) serial # (169028142436 Log ===== Destination drive setup ======			
Test Date: Fri Aug 31 15:00:31 2012 Drives: src(E0) dst (31-IDE) other (OF-FU) Source src hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7			
Drives: src(E0) dst (31-IDE) other (OF-FU) Source src hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7			
Source src hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7 Setup: src hash (MD5): < A97C8F36B7AC9D5233B90AC09284 17938985 total sectors (9184760320 bytes) Model (ATLAS10K2-TY092J) serial # (169028142436 Log ====== Destination drive setup ======			
Source src hash (SHA1): < 4A6941F1337A8A22B10FC844B4D7 Setup: src hash (MD5): < A97C8F36B7AC9D5233B90AC09284 17938985 total sectors (9184760320 bytes) Model (ATLAS10K2-TY092J) serial # (169028142436 Log ====== Destination drive setup ======			
Setup: src hash (MD5): < A97C8F36B7AC9D5233B90AC09284			
17938985 total sectors (9184760320 bytes) Model (ATLAS10K2-TY092J) serial # (169028142436 Log ===== Destination drive setup ======			
Model (ATLAS10K2-TY092J) serial # (169028142436			
Log ====== Destination drive setup ======	:)		
	J		
Highlights: 35673120 sectors wiped with 31			
====== Comparison of original to clone drive ==	:====		
Sectors compared: 17938985			
Sectors match: 17938985			
Sectors differ: 0			
Bytes differ: 0			
Diffs range			
Source (17938985) has 17734135 fewer sectors th	an destination (35673120)		
Zero fill: 0			
Src Byte fill (E0): 0			
Dst Byte fill (31): 17734135			
Other fill: 0			
Other no fill: 0			
Zero fill range:			
Src fill range:			
Dst fill range: 17938985-35673119			
-			
Other fill range:			
Other not filled range:			
0 source read errors, 0 destination read errors			
OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubun	tu SMP Tue Apr 10 22:19:09		
	UTC 2012 i686 i686 i386 GNU/Linux		
STC 2012 1000 1000 1000 GNU/LITUK	====== Excerpt from Tool log =======		
====== Excerpt from Tool log =======			
====== Excerpt from Tool log ======= ========== Hashes:			
======= Excerpt from Tool log ======= =============================	2200		
======= Excerpt from Tool log ======= =========== Hashes: Digest hash information MD5: a97c8f36b7ac9d523			
======= Excerpt from Tool log ======= ============ Hashes: Digest hash information MD5: a97c8f36b7ac9d523 SHA1: 4a6941f1337a8a22b	010fc844b4d7fa6158becb82		
======= Excerpt from Tool log ====== =========== Hashes: Digest hash information MD5: a97c8f36b7ac9d523 SHA1: 4a6941f1337a8a22b Hash values calculated during initial creation:	010fc844b4d7fa6158becb82		
======= Excerpt from Tool log ====== ============ Hashes: Digest hash information MD5: a97c8f36b7ac9d523 SHA1: 4a6941f1337a8a22b Hash values calculated during initial creation: Total (md5): a97c8f36b7ac9d5233b90ac09284f938	010fc844b4d7fa6158becb82		
======= Excerpt from Tool log ====== =========== Hashes: Digest hash information MD5: a97c8f36b7ac9d523 SHA1: 4a6941f1337a8a22b Hash values calculated during initial creation:	010fc844b4d7fa6158becb82		
======= Excerpt from Tool log ====== ============ Hashes: Digest hash information MD5: a97c8f36b7ac9d523 SHA1: 4a6941f1337a8a22b Hash values calculated during initial creation: Total (md5): a97c8f36b7ac9d5233b90ac09284f938	010fc844b4d7fa6158becb82		
<pre>======= Excerpt from Tool log ======= ========= Hashes: Digest hash information</pre>	010fc844b4d7fa6158becb82		
<pre>====================================</pre>	010fc844b4d7fa6158becb82		
<pre>e====== Excerpt from Tool log ======= ========= Hashes: Digest hash information MD5: a97c8f36b7ac9d523 SHA1: 4a6941f1337a8a22b Hash values calculated during initial creation: Total (md5): a97c8f36b7ac9d5233b90ac09284f938 Total (sha1): 4a6941f1337a8a22b10fc844b4d7fa615 ====== End of Excerpt from Tool log ======= Results: Assertion & Expected Result</pre>	010fc844b4d7fa6158becb82 58becb82 Actual Result		
<pre>e====== Excerpt from Tool log ====== ========= Hashes: Digest hash information MD5: a97c8f36b7ac9d523 SHA1: 4a6941f1337a8a22b Hash values calculated during initial creation: Total (md5): a97c8f36b7ac9d5233b90ac09284f938 Total (sha1): 4a6941f1337a8a22b10fc844b4d7fa615 ====== End of Excerpt from Tool log ====== Results: Results: Assertion & Expected Result AM-03 Execution environment is XE.</pre>	010fc844b4d7fa6158becb82 88becb82 Actual Result as expected		
<pre>e====== Excerpt from Tool log ======= ========== Hashes: Digest hash information MD5: a97c8f36b7ac9d523 SHA1: 4a6941f1337a8a22b Hash values calculated during initial creation: Total (md5): a97c8f36b7ac9d5233b90ac09284f938 Total (sha1): 4a6941f1337a8a22b10fc844b4d7fa615 ====== End of Excerpt from Tool log ====== Results: Results: Assertion & Expected Result AM-03 Execution environment is XE. AO-12 A clone is created from an image file.</pre>	alofc844b4d7fa6158becb82 8becb82 Actual Result as expected as expected		
<pre>e===================================</pre>	010fc844b4d7fa6158becb82 88becb82 Actual Result as expected		
<pre>e====== Excerpt from Tool log ====== =========== Hashes: Digest hash information MD5: a97c8f36b7ac9d523 SHA1: 4a6941f1337a8a22b Hash values calculated during initial creation: Total (md5): a97c8f36b7ac9d5233b90ac09284f938 Total (sha1): 4a6941f1337a8a22b10fc844b4d7fa615 ====== End of Excerpt from Tool log ====== Results: Results: Assertion & Expected Result AM-03 Execution environment is XE. AO-12 A clone is created from an image file.</pre>	alofc844b4d7fa6158becb82 8becb82 Actual Result as expected as expected		
<pre>e===================================</pre>	Actual Result as expected as expected as expected		

Test Case DA-	14-SCSI Sumuri Paladin 3.0.0
Due lugiet	Turnerted verylty achieved
Analysis:	Expected results achieved

5.2.39 DA-14-THUMB

Test Case DA-	14-THUMB Sumuri Paladin 3.0.0	
Case	DA-14 Create an unaligned clone from an image file.	
Summary:		
Assertions:	AM-03 The tool executes in execution environme	nt XE.
	AO-12 If requested, a clone is created from an	
	AO-13 A clone is created using access interfac	e DST-AI to write to the
	clone device.	
	AO-14 If an unaligned clone is created, each s	
	accurately written to the same disk address on	the clone that the sector
	occupied on the digital source.	
	AO-17 If requested, any excess sectors on a cl	one destination device are
	not modified.	
	AO-23 If the tool logs any log significant inf accurately recorded in the log file.	ormation, the information is
	accuratery recorded in the log life.	
Tester Name:	csr	
Test Host:	McGarrett	
Test Date:	Wed Aug 29 23:15:07 2012	
Drives:	src(D5-thumb) dst (D6-thumb) other (OF-FU)	
	src hash (SHA1): < D68520EF74A336E49DCCF83815B	700000000000000000000000000000000000000
Source Setup:	src hash (MD5): < C843593624B2B3B878596D8760B	
Secup.	505856 total sectors (258998272 bytes)	
	Model (usb2.0Flash Disk) serial # ()	
	π	
Log	===== Destination drive setup ======	
Highlights:	4001760 sectors wiped with D6	
	====== Comparison of original to clone drive =	=====
	Sectors compared: 505856	
	Sectors match: 505856	
	Sectors differ: 0	
	Bytes differ: 0	
	Diffs range	
	Source (505856) has 3495904 fewer sectors than	destination (4001760)
	Zero fill: 0	
	Src Byte fill (D5): 0	
	Dst Byte fill (D6): 3495904	
	Other fill: 0	
	Other no fill: 0	
	Zero fill range:	
	Src fill range:	
	Dst fill range: 505856-4001759	
	Other fill range: Other not filled range:	
	0 source read errors, 0 destination read error	C
	o source read errors, o descritacion read error	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubu	ntu SMP Tue Apr 10 22:19:09
	UTC 2012 i686 i686 i386 GNU/Linux	100 SHL 10C HPT 10 22-19-09
	======= Excerpt from Tool log =======	
	=============== Hashes:	
	Hash values calculated during initial creation	:
	Total (md5): c843593624b2b3b878596d8760b19954	
	Total (shal): d68520ef74a336e49dccf83815b7b08f	dc53e38a
	====== End of Excerpt from Tool log =======	
Results:		
	Assertion & Expected Result	Actual Result
	AM-03 Execution environment is XE.	as expected
	AO-12 A clone is created from an image file.	as expected
	AO-13 Clone created using interface AI.	as expected
	AO-14 An unaligned clone is created.	as expected
	A0-17 Excess sectors are unchanged.	as expected
	AO-23 Logged information is correct.	as expected
Analysis:	Expected results achieved	

5.2.40 DA-14-USB

Test Case DA	-14-USB Sumuri Paladin 3.0.0	
Case	DA-14 Create an unaligned clone from an image file.	
Summary:		
Assertions:	AM-03 The tool executes in execution environment XE.	
	AO-12 If requested, a clone is created from an image file. AO-13 A clone is created using access interface DST-AI to write to the clone	
	device.AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.AO-17 If requested, any excess sectors on a clone destination device are not modified.	
	AO-23 If the tool logs any log significant information, the information is	
	accurately recorded in the log file.	
Tester	jrr	
Name:	Saimitar	
Test Host:	Scimitar	
Test Date:	Thu Aug 30 14:25:59 2012	
Drives:	src(63-FU2) dst (7A-SATA) other (OC-FU)	
Source Setup:	<pre>src hash (SHA256): < EC8EF011494BA6DA18F74C47547C3E74E7180585096A830F9247A98EF613BB1D ></pre>	
becup.	src hash (SHA1): < F7069EDCBEAC863C88DECED82159F22DA96BE99B >	
	src hash (MD5): < EE217BC4FA4F3D1B4021D29B065AA9EC >	
	117304992 total sectors (60060155904 bytes)	
	Model (SP0612N) serial # ()	
	N Start LBA Length Start C/H/S End C/H/S boot Partition type	
	1 P 000000063 004192902 0000/001/01 0260/254/63 Boot 06 Fat16	
	2 X 004192965 113097600 0261/000/01 1023/254/63 0F extended	
	3 S 000000063 113097537 0261/001/01 1023/254/63 0B Fat32	
	4 S 000000000 00000000 0000/000/00 0000/000/00 00	
	5 P 000000000 00000000 0000/000/00 0000/00/	
	6 P 000000000 00000000 0000/000/00 0000/000/00 00	
	1 004192902 sectors 2146765824 bytes	
	3 113097537 sectors 57905938944 bytes	
Log	===== Destination drive setup ======	
Highlights:	156250000 sectors wiped with 7A	
	====== Comparison of original to clone drive ======	
	Sectors compared: 117304992	
	Sectors match: 117304992	
	Sectors differ: 0	
	Bytes differ: 0	
	Diffs range	
	Source (117304992) has 38945008 fewer sectors than destination (156250000) Zero fill: 0	
	Src Byte fill (63): 0	
	Dst Byte fill (7A): 38945008	
	Other fill: 0	
	Other no fill: 0	
	Zero fill range:	
	Src fill range:	
	Dst fill range: 117304992-156249999	
	Other fill range:	
	Other not filled range:	
	0 source read errors, 0 destination read errors	
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09	
	UTC 2012 i686 i686 i386 GNU/Linux	
	Everyt from Tool log	
	====== Excerpt from Tool log =======	
	============ Hashes: Hash values calculated during initial creation:	
	Total (md5): ee217bc4fa4f3d1b4021d29b065aa9ec	
	Total (shal): f7069edcbeac863c88deced82159f22da96be99b	
	Total (Shar). Troopedebedeooseoodeeedo2157122da70be75b	

	====== End of Excerpt from Tool log =======	
Results:	Assertion & Expected Result	Actual Result
	AM-03 Execution environment is XE.	as expected
	AO-12 A clone is created from an image file.	as expected
	AO-13 Clone created using interface AI.	as expected
	AO-14 An unaligned clone is created.	as expected
	A0-17 Excess sectors are unchanged.	as expected
	AO-23 Logged information is correct.	as expected

5.2.41 DA-17

Test Case DA-	17 Sumuri Paladin 3.0.0	
Case	DA-17 Create a truncated clone from an image file.	
Summary:		
Assertions:	AM-03 The tool executes in execution environment	
	AO-12 If requested, a clone is created from an	
	AO-13 A clone is created using access interface	e DST-AI to write to the clone
	device.	
	AO-19 If there is insufficient space to create	-
	clone is created using all available sectors of	
	AO-20 If a truncated clone is created, the tool notifies the user.	
	AO-23 If the tool logs any log significant info	ormation, the information is
	accurately recorded in the log file.	
Tester	csr	
Name:		
Test Host:	McGarrett	
Test Date:	Wed Aug 29 01:20:03 2012	
Drives:	<pre>src(41) dst (9E) other (0F-FU)</pre>	
Source	src hash (SHA256): <	
Setup:	<pre>FBF3AA21489653D880FFAE71449A9F7E8EE4F56A6C3BF58A3A3FFB13203F1B1D > src hash (SHA1): < 15CAA1A307271160D8372668BF8A03FC45A51CC9 ></pre>	
	src hash (MD5): < 0A6A8EF78BDC14E2026710D8CCB	5607C >
	78125000 total sectors (4000000000 bytes)	
	65534/015/63 (max cyl/hd values)	
	65535/016/63 (number of cyl/hd)	
	IDE disk: Model (WDC WD400BB-75JHC0) serial #	
	-	boot Partition type
	1 P 000000063 078107967 0000/001/01 1023/254/6	
	2 P 00000000 0000000 0000/000/00 0000/00/0	
	3 P 000000000 000000000 0000/000/00 0000/000/00 4 P 000000000 000000000 0000/000/00 0000/000/00	00 00 empty entry
		00 00 empty entry
	1 078107967 sectors 39991279104 bytes	
Log	===== Destination drive setup ======	
Highlights:	39102336 sectors wiped with 9E	
	===== Comparison of original to clone drive ==	=====
	Sectors compared: 39102336	
	Sectors match: 39102336	
	Sectors differ: 0	
	Bytes differ: 0	
	Diffs range	1
	Source (78125000) has 39022664 more sectors that	
	0 source read errors, 0 destination read errors	S
	OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubur	ntu SMP Tue Apr 10 22:19:09
	UTC 2012 i686 i686 i386 GNU/Linux	
	Marrie From to - 1	
	============= Message from tool	
dcfldd:: No space left on device		
	======= Excerpt from Tool log ========	
	II. ab a a t	
	======== Hashes:	
	Digest hash information	00C71040
	Digest hash information MD5: 0a6a8ef78bdc14e20	
	Digest hash information MD5: 0a6a8ef78bdc14e2 SHA1: 15caala307271160	d8372668bf8a03fc45a51cc9
	Digest hash information MD5: 0a6a8ef78bdc14e2 SHA1: 15caala307271160 Hash values calculated during initial creation	d8372668bf8a03fc45a51cc9
	Digest hash information MD5: 0a6a8ef78bdc14e2 SHA1: 15caala307271160	d8372668bf8a03fc45a51cc9
Pogulta	Digest hash information MD5: 0a6a8ef78bdc14e2 SHA1: 15caala307271160 Hash values calculated during initial creation	d8372668bf8a03fc45a51cc9
Results:	Digest hash information MD5: 0a6a8ef78bdc14e20 SHA1: 15caala3072711600 Hash values calculated during initial creation ======= End of Excerpt from Tool log =======	18372668bf8a03fc45a51cc9 :
Results:	Digest hash information MD5: 0a6a8ef78bdc14e20 SHA1: 15caala3072711600 Hash values calculated during initial creation ======= End of Excerpt from Tool log ======= Assertion & Expected Result	d8372668bf8a03fc45a51cc9 : Actual Result
Results:	Digest hash information MD5: 0a6a8ef78bdc14e20 SHA1: 15caala3072711600 Hash values calculated during initial creation ======= End of Excerpt from Tool log ======= Assertion & Expected Result AM-03 Execution environment is XE.	d8372668bf8a03fc45a51cc9 : Actual Result as expected
Results:	Digest hash information MD5: 0a6a8ef78bdc14e20 SHA1: 15caala3072711600 Hash values calculated during initial creation ======= End of Excerpt from Tool log ======= Assertion & Expected Result AM-03 Execution environment is XE. AO-12 A clone is created from an image file.	Actual Result as expected as expected
Results:	Digest hash information MD5: 0a6a8ef78bdc14e20 SHA1: 15caala3072711600 Hash values calculated during initial creation ======= End of Excerpt from Tool log ======= Assertion & Expected Result AM-03 Execution environment is XE. AO-12 A clone is created from an image file. AO-13 Clone created using interface AI.	d8372668bf8a03fc45a51cc9 : Actual Result as expected
Results:	Digest hash information MD5: 0a6a8ef78bdc14e20 SHA1: 15caala3072711600 Hash values calculated during initial creation ====== End of Excerpt from Tool log ======= Assertion & Expected Result AM-03 Execution environment is XE. AO-12 A clone is created from an image file. AO-13 Clone created using interface AI. AO-19 Truncated clone is created.	Actual Result as expected as expected
Results:	Digest hash information MD5: 0a6a8ef78bdc14e20 SHA1: 15caala3072711600 Hash values calculated during initial creation ======= End of Excerpt from Tool log ======= Assertion & Expected Result AM-03 Execution environment is XE. AO-12 A clone is created from an image file. AO-13 Clone created using interface AI.	Actual Result as expected as expected as expected as expected
Results:	Digest hash information MD5: 0a6a8ef78bdc14e20 SHA1: 15caala3072711600 Hash values calculated during initial creation ====== End of Excerpt from Tool log ======= Assertion & Expected Result AM-03 Execution environment is XE. AO-12 A clone is created from an image file. AO-13 Clone created using interface AI. AO-19 Truncated clone is created.	Actual Result as expected as expected as expected as expected as expected as expected

Test Case DA-	17 Sumuri Paladin 3.0.0
Analysis:	Expected results achieved

5.2.42 DA-24

Test Case DA	-24 Sumuri Paladin 3.0.0	
Case	DA-24 Verify a valid image.	
Summary:		
Assertions:	AM-03 The tool executes in execution enviro AO-06 If the tool performs an image file in that has not been changed since the file wa the user that the image file has not been of AO-23 If the tool logs any log significant accurately recorded in the log file.	tegrity check on an image file s created, the tool shall notify hanged.
Tester	jrr	
Name:		
Test Host:	Scimitar	
Test Date:	Sat Sep 8 12:03:19 2012	
Drives:	src(63-FU2) dst (none) other (OC-FU)	
Source	src hash (SHA256): <	
Setup:	1 P 000000063 004192902 0000/001/01 0260/2 2 X 004192965 113097600 0261/000/01 1023/2 3 S 000000063 113097537 0261/001/01 1023/2 4 S 00000000 00000000 0000/000/00 0000/0 5 P 000000000 00000000 0000/000/00 0000/0 6 P 00000000 00000000 0000/000/00 0000/0 1 004192902 sectors 2146765824 bytes 3 113097537 sectors 57905938944 bytes	2159F22DA96BE99B > 065AA9EC > H/S boot Partition type 54/63 Boot 06 Fat16 54/63 0F extended 54/63 0B Fat32 00/00 00 empty entry 00/00 00 empty entry 00/00 00 empty entry
Log Highlights:	OS: Linux Paladin 3.2.0-23-generic-pae #36- UTC 2012 i686 i686 i386 GNU/Linux ======= Excerpt from Tool log ======= =============================	Ubuntu SMP Tue Apr 10 22:19:09
	Hash values for verification started at 20120910 08:14:36: Total (md5): ee217bc4fa4f3d1b4021d29b065aa9ec Total (sha1): f7069edcbeac863c88deced82159f22da96be99b ======= End of Excerpt from Tool log =======	
Results:		
	Assertion & Expected Result	Actual Result
	AM-03 Execution environment is XE.	as expected
	AO-06 Tool verifies image file unchanged.	as expected
	AO-23 Logged information is correct.	as expected
June Jacobie +	The stad ward to a shi and	
Analysis:	Expected results achieved	

5.2.43 DA-25

user that the image file has been changed. AO-08 If the tool performs an image file integrity check on an image file	Test Case DA-	25 Sumuri Paladin 3.0.0	
Assertions: AM-03 The tool executes in execution environment XE. A0-07 if the tool performs an image file integrity check on an image file that has been changed since the file was created, the tool shall notify the user that the image file integrity check on an image file that has been changed since the file was created, the tool shall notify the user of the affected locations. A0-03 if the tool logs any log significant information, the information is accurately recorded in the log file. TestEnt: Scimitar Scure: Scimitar Secure: Scimitar Secure: Scimitar Secure: Scimitar Scure: Scimitar Scimitar Scure: Scimitar Scure: Scimitar Scure: Scure: Scure: Scure: Scure: Scure: Scure: Scure: Scure: Scure: Scure: Scure: Scure:		DA-25 Detect a corrupted image.	
A0-07 If the tool performs an image file integrity check on an image file that has been changed since the file was created, the tool shall notify the user of the tool performs an image file integrity check on an image file that has been changed since the file was created, the tool shall notify the user of the affected locations. A0-23 If the tool logs any log significant information, the information is accurately recorded in the log file. Test Host: Scimitar Test Host: Mon Sep 10 10:14/10 2012 Drives: src(43) data (none) other (OF-FU) Source src hash (SHA256): <	1		VE
Name: - Test Host: Scinitar Test Date: Mon Sep 10 10:14:10 2012 Drives: src(43) dst (none) other (OF-FU) Source src hash (SHA256): < Setup: ScfSP47603D26B3D68364032973327E7A523TC7A32281D0939225065E5871.> src hash (MD5): SetDer7AD23TC7A32281D0939225065E5871.> src hash (MD5): SetDer7AD23TC7A732281D0939225065E5871.> Strc hash (MD5): SetDer7AD23TC7A732281D0939225065E5871.> Src hash (MD5): SetDer7AD23TC7A732281D0937254653.00 Nattintar SetDer7AD237001011023/254463.00 OF extended Sto00000053 000320671023/000/01 1023/254463.00 SetLended S 000000063 00401925 1023/000/01 1023/254463.00 SetLended S 000000063 00401925 1023/000/01 1023/254463.00 SetLended S 000000063 00401925 1023/000/01 1023/254463.00 SetLended S 0000000063 0040093 1023/000/01 1023/254463.00 S	Assertions:	AO-07 If the tool performs an image file integrity check on an image file that has been changed since the file was created, the tool shall notify the user that the image file has been changed.AO-08 If the tool performs an image file integrity check on an image file that has been changed since the file was created, the tool shall notify the user of the affected locations.AO-23 If the tool logs any log significant information, the information is	
Test Date: Mon Sep 10 10:14:10 2012 Drives: src(43) dst (none) other (OF-FU) Source src hash (SHA156): Setup: 2655F47603D66BDD883B6483299733F578658D08D06A4BB8C053C4F57BDC615E > src hash (MD5): B6822F77AD237Dc7732281DD93F235065E5871 > Src hash (MD5): B6822F77AD237Dc7732281DD947525065E5871 > Src hash (MD5): B6822F77AD237Dc7732281DD94752506528 Model (DBE-75JHC0) escial # (WD-WMANC46588) N Start LEA Length Start C/H/S End C/H/S boot Partition type 1 P 00000063 002960827 0000/0110132/254/63 0F extended 5 s 00000063 002104515 1023/000/01 1023/254/63 0F extended 5 S 00000063 002104515 1023/000/01 1023/254/63 0F extended 5 s 00000063 00210451023/001/01 1023/254/63 0F extended 6 x 002136645 004192905 1023/001/01 1023/254/63 0F extended 9 s 00000063 00210451023/001/01 1023/254/63 0F extended 1 s 00000006 00000000 1023/001/01 1023/254/63 0F extended 13 s 00000063 00208967 1023/001/01 1023/254/63 0F extended 1 s 000000000 00000000 0000/001 1023/254/63 0F extended 13 s 00000063 00208967 1023/001/01 1023/254/63 0F extended 1 s 00000000 00000000 0000/001 1023/254/63 0F extended 13 s 00000063 00208967 1023/001/01 1023/254/63 0F extended 1 s 00000000 00000000 0000/001 1023/254/63 0F extended 15 s 000000000 000000000 0000/000/00 00000/000/00		jrr	
Drives: src(43) dat (none) other (9F-FU) Source src hash (SHA26) 2658F47603DE6b108836642259733F578655D0BD06A4BB8C053C4F57DEC15E > Src hash (MD5): & 8029C3FER7A50577B9A1865A5AEBF7 > 78125000 total sectors (4000000000 bytes) Model (DB=75JRCO) serial # (wo-WWAMC46588) N Start LBA Length Start C/H/S End C/H/S Dot Patizix 1 P 000000063 02098027 0000/001/01 023/254/63 OC FatiZix 2 X 020980890 057143205 1023/0001/01 0133/254/63 OF FatiZix 2 X 020980890 057143205 1023/001/01 0133/254/63 OF FatiZix 2 X 020980890 057143205 1023/001/01 1023/254/63 OF FatiZix 4 x 000032100 02104452 1023/001/01 1023/254/63 OF extended 5 s 00000063 004912902 1023/001/01 1023/254/63 OF extended 5 s 00000063 00401392 1023/001/01 1023/254/63 OF extended 10 x 014731605 01049045 1023/001/01 1023/254/63 OF extended 11 S 000000063 00409382 1023/001/01 1023/254/63 OF extended 13 S 00000063 00420930 1023/001/01 1023/254/63 OF extended 12 x 02522050 00420930 1023/000/01 1023/254/63 OF extended 13 S 000000063 0000000 0000/012/254/63 OF extended 13 s 0000000063 00000000 1023/001/01 1023/254/	Test Host:	Scimitar	
Source src hash (SHA256): Setup: 2568474/603D665L0483B6442359733F578658D08D06A4BB8C053C4F57BDCG15E > src hash (MD5): < 8639C377E7A5027D7A732281DD93F3250655871 > src hash (MD5): < 8639C377E7A5027D9PA1E65A5AEE77 > 73125000 total sectors (400000000 bytes) Model (OBB-75JBC0) serial # (WD-MMAMC45588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 00000063 020980827 0000/001/01 1023/254/63 D0 Fextended 3 s 00000063 00032067 1023/000/01 1023/254/63 O5 extended 3 s 00000063 002104452 1023/000/01 1023/254/63 O5 extended 5 s 00000063 002104452 1023/000/01 1023/254/63 O5 extended 7 s 00000063 002104452 1023/000/01 1023/254/63 O5 extended 7 s 00000063 004192902 1023/000/01 1023/254/63 O5 extended 7 s 00000063 004192902 1023/000/01 1023/254/63 O5 extended 1 s 00000063 00490389 1023/000/01 1023/254/63 O5 extended 1 s 00000063 004209301 1023/000/01 1023/254/63 O5 extended 1 s 00000060 004090380 1023/000/01 1023/254/63 O5 extended 1 s 00000060 004209301 1023/000/01 1023/254/63 O5 extended 1 s 00000006 0027712022 1023/001/01 1023/254/63 O5 extended 1 s 00000000 00000000 0000/000/00 000 empty entry 1 2 x 025222050 004209903 1023/000/01 1023/254/63 O7 NTFS 16 s 000000000 0000000 0000/000/00 0000/000/00 00	Test Date:	Mon Sep 10 10:14:10 2012	
Setup: 2558r4763DE661D883B64823E9733F57865B008D6A4BBC053C4F57BDC61E > src hash (SHA): < 8882E777AD237DC7A73228LD93972350555871 > src hash (MD5): < 8C39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (400000000 bytes) Model (OBB-75.HCC)) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S bot Partition type I P 00000063 00290827 0000/001/01 1023/254/63 00 Fextended 3 S 00000063 0002104515 1023/001/01 1023/254/63 01 Fextended 5 S 00000063 002104515 1023/001/01 1023/254/63 05 extended 7 S 00000063 002104521 0023/001/01 1023/254/63 05 extended 7 S 00000063 002104521 0023/001/01 1023/254/63 05 extended 9 S 00000063 008401995 1023/001/01 1023/254/63 05 extended 11 S 00000063 008401932 1023/001/01 1023/254/63 05 extended 11 S 00000063 004209302 1023/001/01 1023/254/63 05 extended 11 S 00000063 004209302 1023/001/01 1023/254/63 05 extended 11 S 00000063 004209302 1023/001/01 1023/254/63 05 extended 13 S 00000063 004209302 1023/001/01 1023/254/63 05 extended 13 S 00000063 004209302 1023/001/01 1023/254/63 05 extended 13 S 00000063 004209307 1023/001/01 1023/254/63 05 extended 13 S 00000063 00771225 1023/001/01 1023/254/63 05 extended 15 S 000000063 00771226 1023/001/01 1023/254/63 07 NTFS 16 S 00000000 00000000 0000/000 0000/000 00	Drives:		
Highlights:====== Image file corrupted for test run: ===== Change byte 151552 of file da-07-FAT16.dmg from 0x30 to 0x46 OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubuntu SMP Tue Apr 10 22:19:09 UTC 2012 i686 i686 i386 GNU/Linux===================================		2658F47603DE6B1D883B64823E9733F578658D08D06A4BB8 src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F Src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AE 78125000 total sectors (4000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC N Start LBA Length Start C/H/S End C/H/S 1 P 00000063 020980827 0000/001/01 1023/254/63 3 s 00000063 00032067 1023/000/01 1023/254/63 4 x 000032130 002104515 1023/000/01 1023/254/63 5 s 00000063 002104452 1023/001/01 1023/254/63 6 x 002136645 004192965 1023/000/01 1023/254/63 7 s 00000063 004192902 1023/001/01 1023/254/63 8 x 006329610 008401995 1023/000/01 1023/254/63 9 s 00000063 004401995 1023/000/01 1023/254/63 11 s 00000063 010490445 1023/000/01 1023/254/63 12 x 02522050 004209030 1023/001/01 1023/254/63 14 x 029431080 027712125 1023/001/01 1023/254/63 15 s 00000063 027712062 1023/001/01 1023/254/63 16 s 00000063 027712062 1023/001/01 1023/254/63 17 P 00000063 027712062 1023/001/01 1023/254/63 18 s 00000063 027712062 1023/001/01 1023/254/63 19 s 00000063 027712062 1023/001/01 1023/254/63 10 x 014731605 0174208967 1023/001/01 1023/254/63 14 x 029431080 027712125 1023/001/01 1023/254/63 15 s 00000006 00000000 0000/000/00 0000/000/	325065E5871 > EF7 > 46588) boot Partition type OC Fat32X OF extended O1 Fat12 O5 extended O6 Fat16 O5 extended O6 Fat32 O5 extended O8 Fat32 O5 extended 83 Linux O5 extended 83 Linux O5 extended 83 Linux O5 extended 06 Fat32 O5 extended 07 NTFS O0 empty entry O0 empty entry
Assertion & Expected Result Actual Result	-	Change byte 151552 of file da-07-FAT16.dmg from OS: Linux Paladin 3.2.0-23-generic-pae #36-Ubunt UTC 2012 i686 i686 i386 GNU/Linux ======= Excerpt from Tool log ======= ======== Hashes: Hash values for verification started at 20120910 Total (md5): 84a587911a67ba972d3151f107738dc9 Total (shal): 676ae47cef13617c5ae31e4c49f58711ef	0x30 to 0x46 u SMP Tue Apr 10 22:19:09 10:31:58:
Assertion & Expected Result Actual Result	Results:		
AM-03 Execution environment is XE. as expected		Assertion & Expected Result	Actual Result
		AM-03 Execution environment is XE.	as expected

Test Case DA-25 Sumuri Paladin 3.0.0		
	AO-07 User notified if image file has changed.	as expected
	AO-08 User notified of changed locations.	as expected
	AO-23 Logged information is correct.	as expected
Analysis:	Expected results achieved	