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Special **REPORT**

Test Results for Digital Data Acquisition Tool: DCCIdd (Version 2.0)

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Contents

Introduction

The Computer Forensics Tool Testing (CFTT) program is a joint project of the National Institute of Justice (NIJ), the research and development organization of the U.S. Department of Justice, and the National Institute of Standards and Technology's (NIST's) Office of Law Enforcement Standards and Information Technology Laboratory. CFTT is supported by other organizations, including the Federal Bureau of Investigation, the U.S. Department of Defense Cyber Crime Center, the 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 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. This approach to testing computer forensic tools is based on well-recognized methodologies for conformance and quality testing. The specifications and test methods are posted on the CFTT Web site (http://www.cftt.nist.gov/) for review and comment by the computer forensics community.

This document reports the results from testing the **DCCIdd**, version 2.0, 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 software packages and the CFTT tool methodology can be found on NIJ's computer forensics tool testing Web page, http://www.ojp.usdoj.gov/nij/topics/ecrime/cftt.htm.

Test Results for Digital Data Acquisition Tool

Tool Tested: DCCIdd
Version: 2.0
Run Environment: Helix Linux Boot CD

Supplier: DoD Cyber Crime Institute (DCCI)

Address: DoD Cyber Crime Institute
                    http://www.dc3.mil/
                    dcci@dc3.mil

1. Results Summary

Except for two test cases, the tested tool acquired all visible and hidden sectors completely and accurately from the test media. The two exceptions are the following:

1. Up to seven sectors contiguous to a faulty sector may be replaced by zeros in the acquisition.
2. The sectors hidden by a *Device Configuration Overlay* (DCO) are not acquired.

2. Test Case Selection

Not all test cases or test assertions are appropriate for all tools. In addition to all required cases, each remaining test case is linked to optional tool features needed for the test case. If a given tool implements a given feature, then the test cases linked to that feature are run. Table 1 lists the features available in DCCIdd and the linked test cases. Table 2 lists the features not available in DCCIdd and the linked test cases.

Table 1 Selected Test Cases

Supported Optional Feature	Cases selected for execution
Base Cases	06, 07, 08 & 12
Create a clone during acquisition	01, 02 & 04
Read error during acquisition	09
Create a clone from an image file	14 & 17

Table 2 Omitted Test Cases

Unsupported Optional Feature	Cases omitted (not executed)
Create cylinder aligned clones	03, 15, 21 & 23
Create an image file in more than one format	10
Convert an image file from one format to another	26
Destination device switching	13

Unsupported Optional Feature	Cases omitted (not executed)
Device I/O error generator available	05, 11 & 18
Fill excess sectors on a clone device	19, 20, 21, 22 & 23
Create a clone from a subset of an image file	16
Detect a corrupted (or changed) image file	24 & 25

Some test cases have variant forms to accommodate parameters within test assertions AM–01, AM–02, AM–03, AM–05, and AO–13. For an acquisition, the tool must execute in an execution environment. In addition, a digital source defines the type of object acquired. The access interface for the source must be specified. Additional test parameters include the file system type for creation of the image file and the access interface used to write to a clone. Variations were also created for AO–02, image file format, and AO–09, image format conversion.

The tool was executed in the Helix (Linux) run time environment. The output of the **uname –a** command is: `Linux Knoppix 2.6.14-Helix #1 SMP Sat Nov 19 19:54:49 CET 2005 i686 GNU/Linux`

The following source interfaces were tested: ATA28, ATA48, SATA28, SATA48, SCSI, USB, and Firewire.

The following digital sources were tested: partitions (FAT12, FAT16, FAT32, FAT32X, EXT2, NTFS, and Linux Swap), flash card, and thumb drive.

The image files were created on FAT32X partitions.

The following interfaces were used for clone creation: ATA28, ATA48, SATA28, SATA48, SCSI, USB, and Firewire.

3. Results by Test Assertion

Table 3 summarizes the test results 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 the anomaly is discussed. Two test assertions only apply in special circumstances. The assertion AO–22 is checked only for tools that create block hashes. This assertion does apply to DCCIdd. 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 3 Results Summary by Assertion

Assertions Tested	Tests	Anomaly
AM–01 The tool uses access interface SRC–AI to access the digital source.	38	
AM–02 The tool acquires digital source DS.	38	
AM–03 The tool executes in execution environment XE.	55	
AM–04 If clone creation is specified, the tool creates a clone of the digital source.	17	
AM–05 If image file creation is specified, the tool creates an image file on file system type FS.	21	
AM–06 All visible sectors are acquired from the digital source.	37	
AM–07 All hidden sectors are acquired from the digital source.	3	3.1
AM–08 All sectors acquired from the digital source are acquired accurately.	37	3.2
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.	1	
AM–10 If unresolved errors occur while reading from the selected digital source, the tool uses a benign fill in the destination object in place of the inaccessible data.	1	
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.	20	
AO–04 If the tool is creating an image file and there is insufficient space on the image destination device to contain the image file, the tool shall notify the user.	1	
AO–05 If the tool creates a multifile image of a requested size then all the individual files shall be no larger than the requested size.	20	
AO–11 If requested, a clone is created during an acquisition of a digital source.	17	
AO–12 If requested, a clone is created from an image file.	17	
AO–13 A clone is created using access interface DST–AI to write to the clone device.	34	
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.	33	
AO–17 If requested, any excess sectors on a clone destination device are not modified.	17	
AO–19 If there is insufficient space to create a complete clone, a truncated clone is created using all available sectors of the clone device.	2	
AO–20 If a truncated clone is created, the tool notifies the user.	2	
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.	37	
AO–23 If the tool logs any log significant information, the information is accurately recorded in the log file.	55	
AO–24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.	38	

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
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–06 If the tool performs an image file integrity 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 check on an image file that has been changed since the

Assertions Not Tested
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–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 multifile 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 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.

3.1 Acquisition of HPA and DCO

The tool does not remove either *Host Protected Areas* (HPAs) or DCOs. However, the Helix test environment automatically removed the HPA on the test drive, allowing the tool to image sectors hidden by an HPA.

3.2 Acquisition of Faulty Sectors

In typical forensic operations, DCCIdd is executed with the **sync** and **noerror** options. In such operations, if DCCIdd encounters a faulty sector (i.e., a sector that cannot be read) on a source drive, a sector of zeros is returned in place of the data that could not be read. In addition to the unreadable sector, a contiguous run of adjacent sectors are also acquired as zeros. For a drive imaged through the ATA interface, the tool behaves as if the drive being imaged is divided into contiguous runs of eight sectors each. If there are one or more faulty sectors within a given run, then the entire run is treated as defective by the tool and each byte of the entire run of eight sectors is acquired as zeros. It should be noted that only the ATA interface on Linux (`2.6.14-Helix`) was used in the testing of DCCIdd. Other interfaces (e.g., USB, Firewire, or SCSI) or other operating systems (e.g., FreeBSD or a different version of Linux) may exhibit other behavior (e.g., a different run length).

The starting and ending sectors of the run observed using the ATA interface in Linux can be calculated from the address of a defective sector as follows:

1. Let x be the address of a faulty sector.
2. Write x in octal.
3. Replace the right most digit of x with zero. This is the starting address of the run.
4. Add 7 to the starting address of the run. This is the ending address of the run.

For example, suppose sector 18,652,594 is faulty. This address in octal is: 107 116 662. The starting address of the enclosing run is 107 116 660 (octal), 18,652,592 (decimal). The last sector of the run is 107 116 660 + 7 which equals 107 116 667 (octal) or 18,652,599 (decimal).

Test case **da-09** uses a hard drive with 54 known defective sectors. Table 5 presents a list of the defective sectors along with a list of the sectors filled with zeros. The defective sectors are listed in the column labeled **LBA of Faulty Sector**. The beginning and ending sectors of the enclosing eight sector block are listed in the column labeled **8 Sector Block (From–To)**. Nine of the faulty sectors fall within the same enclosing eight sector blocks and are designated by the comment *Overlapping range* in the column. The actual differences between the source drive and the sectors acquired by the tool are recorded in the column labeled **Zero Filled**. In one case there are two adjacent 8 sector blocks reported by the tool as a single 16 sector range. The 54 faulty sectors yield 45 unique 8 sector blocks, a total of 360 sectors.

Table 5 Acquisition of Faulty Sectors

LBA of Faulty Sector	8 Sector Block (From–To)	Zero Filled
10069095	10069088–10069095	10069088–10069095
10069911	10069904–10069911	10069904–10069911
12023808	12023808–12023815	12023808–12023815
18652594	18652592–18652599	18652592–18652599
18656041	18656040–18656047	18656040–18656047
18656857	18656856–18656863	18656856–18656863
18660303	18660296–18660303	18660296–18660303
18661119	18661112–18661119	18661112–18661119
19746716	19746712–19746719	19746712–19746719
19746717	Overlapping range	19746712–19746719
22233904	22233904–22233911	22233904–22233911
23098370	23098368–23098375	23098368–23098375
23383001	23383000–23383007	23383000–23383007
24102466	Overlapping range	24102464–24102471
24102467	24102464–24102471	24102464–24102471
24104250	24104248–24104255	24104248–24104255
24106656	24106656–24106663	24106656–24106663
24107458	24107456–24107463	24107456–24107463
28959971	28959968–28959975	28959968–28959975
28959972	Overlapping range	28959968–28959975
41825791	41825784–41825791	41825784–41825791
41828995	41828992–41828999	41828992–41828999
52654580	52654576–52654583	52654576–52654583
52655318	52655312–52655319	52655312–52655319
60522984	60522984–60522991	60522984–60522991
68643842	68643840–68643847	68643840–68643847
68643843	Overlapping range	68643840–68643847
69973290	69973288–69973295	69973288–69973295
72714626	72714624–72714631	72714624–72714631
72715293	72715288–72715295	72715288–72715295

LBA of Faulty Sector	8 Sector Block (From–To)	Zero Filled
82148809	82148808–82148815	82148808–82148815
82148810	Overlapping range	82148808–82148815
83810525	83810520–83810527	83810520–83810527
85310861	85310856–85310863	85310856–85310863
85313430	85313424–85313431	85313424–85313431
85314038	85314032–85314039	85314032–85314039
85314039	Overlapping range	85314032–85314039
86321211	86321208–86321215	86321208–86321215
86323780	86323776–86323783	86323776–86323783
87186066	87186064–87186071	87186064–87186071
87856313	87856312–87856319	87856312–87856319
87856922	87856920–87856927	87856920–87856927
97191260	97191256–97191263	97191256–97191263
97191261	Overlapping range	97191256–97191263
100093150	100093144–100093151	100093144–100093151
100093151	Overlapping range	100093144–100093151
103861021	103861016–103861023	103861016–103861023
109706975	109706968–109706975	Adjacent ranges
109706976	109706976–109706983	109706968–109706983
110347947	110347944–110347951	110347944–110347951
110350122	110350120–110350127	110350120–110350127
110350123	Overlapping range	110350120–110350127
115664758	115664752–115664759	115664752–115664759
115835518	115835512–115835519	115835512–115835519

4. Testing Environment

The tests were run in the NIST CFTT lab. This section describes the test computers available for testing.

4.1 Test Computers

Eight test computers were used.

Frank and **Max** have 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
1.44MB floppy drive
Two slots for removable IDE hard disk drives
Two slots for removable SATA hard disk drives
Two slots for removable SCSI hard disk drives

JohnSteed and **JohnStone** have the following configuration:

Intel® Desktop Motherboard FIC IC–VL67 (865G; S478; 800MHz)
BIOS Phoenix Award version v6.00PG
Intel Pentium™ 4 CPU
Plextor DVDR PX–716A, ATAPI CD/DVD-ROM drive
WDC WD800JB-00JJC0, 80 GB ATA disk drive
1.44MB floppy drive
Three IEEE 1394 ports
Four USB ports

Charlie has the following configuration:

Asus P4P8T Intel® Motherboard (865G/ICH 5 chipsets, FSB 800/533/400MHz)
BIOS AMIBIOS© American Megatrends Asus P4P8T–SP ACPI BIOS revision 1003
Intel Pentium™ 4 CPU, 3GHZ
1 GB RAM
Plextor DVDR PX–716A, ATAPI CD/DVD–ROM drive
WDC WD800JB–00JJC0, 80 GB ATA disk drive
Five IEEE 1394 ports
Six USB ports
Memory Card reader

Paladin, AndWife, and **McCloud** have the following configuration:

Intel D845WNL Motherboard
BIOS version HV84510A.86A.0022.P05
Intel Pentium IV 2.0Ghz
512672k RAM
Adaptec 29160 SCSI Adapter card
Tekram DC–390U3W SCSI Adapter card
Plextor CR-RW PX-W124TS Rev: 1.06
LG 52X CDROM
1.44MB floppy drive
Three slots for removable IDE hard disk drives
Two slots for removable SCSI hard disk drive

4.2 Support Software

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

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 File Highlights** box of the test report summary.

5.1 Test Results Report Key

A summary of the actual test results is presented in this report. The following table presents a description of each section of the test report summary.

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.*
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 nonconformance 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

5.2.1 DA-01-ATA28

Test Case DA-01-ATA28 DCCIDD Version 2.0	
Case Summary:	DA-01 Acquire a physical device using access interface AI 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

Test Case DA-01-ATA28 DCCIDD Version 2.0	
	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:	brl
Test Host:	McCloud
Test Date:	Wed Sep 13 12:38:31 2006
Drives:	src(44) dst (82) other (none)

Source Setup:	src hash (SHA1): < E196D36E7B322C0EF83923112AD1800581742B6E > src hash (MD5): < 80ADAC781152642E8D2F7B7C9A8ABF95 > 78165360 total sectors (40020664320 bytes) 65534/015/63 (max cyl/hd values) 65535/016/63 (number of cyl/hd) IDE disk: Model (WDC WD400JB-00FMA0) serial # (WD-WMAJC1011319)
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	  1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X
	  2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended
	  3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12
	  4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended
	  5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16
	  6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended
	  7 S 000000063 004192902 1023/001/01 1023/254/63 16 other
	  8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended
	  9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32
	 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended
	 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux
	 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended
	 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap
	 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended
	 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS
	 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 18 P 000000000 000000000 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 027744192 sectors 14205026304 bytes

Log Highlights:	Destination setup 156301488 sectors wiped with 82 Comparision of original to clone Drive Sectors compared: 78165360 Sectors match: 78165360 Sectors differ: 0 Bytes differ: 0 Diffs range Source (78165360) has 78136128 fewer sectors than destination (156301488) Zero fill: 0 Src Byte fill (44): 0 Dst Byte fill (82): 78136128 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 78165360–156301487 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Hash Window 2001033216 bytes, Algorithms: SHA1 Block hashes from tool for SHA1 1 F91A7C4CDBCD296180ABB292B34BF1ABBF409D94 2 63F9BFE630D91AA5B164E3A057EAB5058B9C440F

```
Test Case DA-01-ATA28 DCCIDD Version 2.0
        3  3850F7EFAFF618193F8CB5301D50CF82AEB77B4A
      . . .
       18  EA1042CE56EB02EDCBE29A1B16BC2DE80B8A89C5
       19  4CC56ED9735500087DB010FEB6E810AEE376F183
       20  1398831F181B677EB3F47A643C6092FF02F08883
Reference block hashes from source drive 44
        1  F91A7C4CDBCD296180ABB292B34BF1ABBF409D94
        2  63F9BFE630D91AA5B164E3A057EAB5058B9C440F
        3  3850F7EFAFF618193F8CB5301D50CF82AEB77B4A
      . . .
       18  EA1042CE56EB02EDCBE29A1B16BC2DE80B8A89C5
       19  4CC56ED9735500087DB010FEB6E810AEE376F183
       20  1398831F181B677EB3F47A643C6092FF02F08883
Acquisition hash: E196D36E7B322C0EF83923112AD1800581742B6E

Rehash of Source SHA1: E196D36E7B322C0EF83923112AD1800581742B6E
```

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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis: Expected results achieved

5.2.2 DA-01-ATA48

Test Case DA-01-ATA48 DCCIDD Version 2.0	
Case Summary:	DA-01 Acquire a physical device using access interface AI 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.
Tester Name:	brl
Test Host:	Frank
Test Date:	Tue Sep 12 15:59:26 2006
Drives:	src(4C) dst (55-IDE) other (none)
Source Setup:	src hash (SHA1): < 8FF620D2BEDCCAFE8412EDAAD56C8554F872EFBF > src hash (MD5): < D10F763B56D4CEBA2D1311C61F9FB382 > 390721968 total sectors (200049647616 bytes) 24320/254/63 (max cyl/hd values) 24321/255/63 (number of cyl/hd) IDE disk: Model (WDC WD2000JB-00KFA0) serial # (WD-WMAMR1031111) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 390700737 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 390700737 sectors 200038777344 bytes

Log Highlights:	Destination setup
	390721968 sectors wiped with 55
	
	Comparision of original to clone Drive
	Sectors compared: 390721968
	Sectors match: 390721968
	Sectors differ: 0
	Bytes differ: 0
	Diffs range
	0 source read errors, 0 destination read errors
	
	Hash Window 10002482381 bytes, Algorithms: SHA1
	Block hashes from tool for SHA1
	     1 C74202FA18EC7D9A791902F6CFEC405CEFC8CCC3
	     2 41CEE9462A863245AC551BDE6F6AACFB8A4E94EE
	     3 5402D64C3AA6074E73B620FD08809F647E56A83F
	 . . .
	    18 E46983DDFE53B4E16410C5A439F1389260C47732
	    19 02543178AC32D891DC564765C9E1958279743201
	    20 E04838764C97EA88B08C5D15BD6ED072BDBA6625
	Reference block hashes from source drive 4C
	     1 C74202FA18EC7D9A791902F6CFEC405CEFC8CCC3
	     2 41CEE9462A863245AC551BDE6F6AACFB8A4E94EE
	     3 5402D64C3AA6074E73B620FD08809F647E56A83F

Test Case DA-01-ATA48 DCCIDD Version 2.0	

	` . . .`
	` 18  E46983DDFE53B4E16410C5A439F1389260C47732`
	` 19  02543178AC32D891DC564765C9E1958279743201`
	` 20  E04838764C97EA88B08C5D15BD6ED072BDBA6625`
	`Acquisition hash: 8FF620D2BEDCCAFE8412EDAAD56C8554F872EFBF`
	
	`Rehash of Source SHA1: 8FF620D2BEDCCAFE8412EDAAD56C8554F872EFBF`

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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis:	Expected results achieved

5.2.3 DA-01-FW

Test Case DA-01-FW DCCIDD Version 2.0	
Case Summary:	DA-01 Acquire a physical device using access interface AI 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.
Tester Name:	brl
Test Host:	JohnSteed
Test Date:	Tue Sep 12 17:02:54 2006
Drives:	src(63-FU2) dst (61-FU2) other (none)
Source Setup:	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 000000000 0000/000/00 0000/000/00 00 empty entry 5 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 6 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 004192902 sectors 2146765824 bytes 3 113097537 sectors 57905938944 bytes

Log Highlights:	Destination setup
	117304992 sectors wiped with 61
	
	Comparision 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
	
	Hash Window 3003007796 bytes, Algorithms: MD5
	Block hashes from tool for MD5
	      1 82F316343BCA4CF7F2DD57C8C9B413D0
	      2 9A6E7F2FD8877A9CDF0A1C843E009ED7
	      3 EBF09928B948A4A6B5983237811CC5CA
	 . ..
	     18 30B8840686852089214OC24C9E4E3835
	     19 95084B3F8E2AF5123ABEFB1FB0FD62FB
	     20 AACFC3AF0A4FAAB2B3E5B8A93B4450B0
	Reference block hashes from source drive 63-FU2
	      1 82F316343BCA4CF7F2DD57C8C9B413D0
	      2 9A6E7F2FD8877A9CDF0A1C843E009ED7

Test Case DA-01-FW DCCIDD Version 2.0	

	3 EBF09928B948A4A6B5983237811CC5CA
	
	. . .
	    18 30B88406868520892140C24C9E4E3835
	    19 95084B3F8E2AF5123ABEFB1FB0FD62FB
	    20 AACFC3AF0A4FAAB2B3E5B8A93B4450B0
	Acquisition hash: EE217BC4FA4F3D1B4021D29B065AA9EC
	
	Rehash of Source SHA1: 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-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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis:	Expected results achieved

5.2.4 DA-01-SATA28

Test Case DA-01-SATA28 DCCIDD Version 2.0	
Case Summary:	DA-01 Acquire a physical device using access interface AI 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.
Tester Name:	brl
Test Host:	Max
Test Date:	Wed Sep 27 15:50:55 2006
Drives:	src(07) dst (02) other (none)
Source Setup:	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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 156280257 sectors 80015491584 bytes

Log Highlights:	Destination setup
	156301488 sectors wiped with 2
	
	Comparision 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
	
	Hash Window 4001318093 bytes, Algorithms: SHA1
	Block hashes from tool for SHA1
	     1 7EDD59528007535433E9B01165D318B1ACF885F8
	     2 81E9A60E806357FE271F63EE7A4A60FCD92380C0
	     3 786BDB956D1B6EF728C53D928B71E4C485649780
	  . . .
	    18 2318005C61D45C568E5E8AA2D332F570A3C0CFD0
	    19 1F0208F2FC1CC80A0103174E013F765F8E1A10D0
	    20 8EBD6A3C7263D3A07FC637F5582AD16B14F26598
	Reference block hashes from source drive 07
	     1 7EDD59528007535433E9B01165D318B1ACF885F8
	     2 81E9A60E806357FE271F63EE7A4A60FCD92380C0
	     3 786BDB956D1B6EF728C53D928B71E4C485649780
	  . . .
	    18 2318005C61D45C568E5E8AA2D332F570A3C0CFD0

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Test Case DA-01-SATA28 DCCIDD Version 2.0	
	19 1F0208F2FC1CC80A0103174E013F765F8E1A10D0 20 8EBD6A3C7263D3A07FC637F5582AD16B14F26598 Acquisition hash: 655E9BDDB36A3F9C5C4CC8BF32B8C5B41AF9F52E Rehash of Source SHA1: 655E9BDDB36A3F9C5C4CC8BF32B8C5B41AF9F52E

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.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected

Analysis:	Expected results achieved

5.2.5 DA-01-SATA48

Test Case DA-01-SATA48 DCCIDD Version 2.0	
Case Summary:	DA-01 Acquire a physical device using access interface AI 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.
Tester Name:	brl
Test Host:	Max
Test Date:	Tue Sep 19 17:28:21 2006
Drives:	src(0D) dst (56-IDE) other (none)
Source Setup:	src hash (SHA1): < BAAD80E8781E55F2E3EF528CA73BD41D228C1377 > 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 488375937 sectors 250048479744 bytes

Log Highlights:	Destination setup
	488397168 sectors wiped with 56
	
	Comparision 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
	
	Hash Window 25005935002 bytes, Algorithms: SHA1
	Block hashes from tool for SHA1
	      1 AF66EA84447CE08D1DAEA85B004C53A89D08520B
	      2 2B7F5627BBB16DD3CA16FBB0FFA973598F2060AB
	      3 41B8E1F58F68C45E820B2E9731C67ADCDFE9507D
	  . . .
	      8 4C82D424A12BDE003A885BC342580996E82053DE
	      9 C495439702CC7F33EDD5D8A4FBDA31FD4505ECB3
	     10 89E76CCF19E75E3116901F785F02A1D6620BE2F2
	Reference block hashes from source drive 0D
	      1 AF66EA84447CE08D1DAEA85B004C53A89D08520B
	      2 2B7F5627BBB16DD3CA16FBB0FFA973598F2060AB
	      3 41B8E1F58F68C45E820B2E9731C67ADCDFE9507D

```
Test Case DA-01-SATA48 DCCIDD Version 2.0
                    . . .
                    8  4C82D424A12BDE003A885BC342580996E82053DE
                    9  C495439702CC7F33EDD5D8A4FBDA31FD4505ECB3
                   10  89E76CCF19E75E3116901F785F02A1D6620BE2F2
           Acquisition hash: BAAD80E8781E55F2E3EF528CA73BD41D228C1377

           Rehash of Source SHA1: BAAD80E8781E55F2E3EF528CA73BD41D228C1377
```

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.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected

Analysis:	Expected results achieved

5.2.6 DA-01-SCSI

Test Case DA-01-SCSI DCCIDD Version 2.0	
Case Summary:	DA-01 Acquire a physical device using access interface AI 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.
Tester Name:	brl
Test Host:	Paladin
Test Date:	Thu Sep 14 12:19:14 2006
Drives:	src(2A) dst (2C) other (none)
Source Setup:	src hash (SHA256): < AE8E839101661367D92803D5F5D408268635EFD8A05FEA633838CDC3919F5ABA > src hash (SHA1): < F5F9F2903DCAB895F36E270FB22A722E27918125 > src hash (MD5): < 91E0AC905F682ECF6DE4E9835089B519 > 17783249 total sectors (9105023488 bytes) Model (QM39100TD-SCA) serial # (PCB=20-116711-06 HDAQM39100TD-SCA) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 017751762 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 017751762 sectors 9088902144 bytes

Log Highlights:	Destination setup
	17783249 sectors wiped with 2C
	
	Comparision of original to clone Drive
	Sectors compared: 17783249
	Sectors match: 17783249
	Sectors differ: 0
	Bytes differ: 0
	Diffs range
	0 source read errors, 0 destination read errors
	
	Hash Window 910502349 bytes, Algorithms: SHA256
	Block hashes from tool for SHA256
	    1 887EDA0AE0820CB1E21407B5ED64D2175E8DFC118C4DCDD665DE9CC1D78CD627
	    2 E3F7A262F242D3DE8F195D64F6D0674FE138703F5AF4C7CE3F09523858E1D710
	    3 2CD42B6229C18657E34D4A45A3BD6FF499C36300C66E40512245C27F8A385BF3
	 . . .
	    8 7A4A062E603A9702C0BD61763CB89763AF9C8C6FEDC8A496D84A8ADA65FABD1B
	    9 E77EEDF84A2DFEC71123013C0774D1C0CB7D9A1D02444C4C4455065CC03F3240
	   10 19C325326D062A3514E4299FB97415A992B0481404D83B313D64A7B4CFF48F48
	Reference block hashes from source drive 2A
	    1 887EDA0AE0820CB1E21407B5ED64D2175E8DFC118C4DCDD665DE9CC1D78CD627
	    2 E3F7A262F242D3DE8F195D64F6D0674FE138703F5AF4C7CE3F09523858E1D710
	    3 2CD42B6229C18657E34D4A45A3BD6FF499C36300C66E40512245C27F8A385BF3

Test Case DA-01-SCSI DCCIDD Version 2.0

```
              . . .
           8  7A4A062E603A9702C0BD61763CB89763AF9C8C6FEDC8A496D84A8ADA65FABD1B
           9  E77EEDF84A2DFEC71123013C0774D1C0CB7D9A1D02444C4C4455065CC03F3240
          10  19C325326D062A3514E4299FB97415A992B0481404D83B313D64A7B4CFF48F48
      Acquisition hash:
      AE8E839101661367D92803D5F5D408268635EFD8A05FEA633838CDC3919F5ABA

      Rehash of Source SHA1: F5F9F2903DCAB895F36E270FB22A722E27918125
```

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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis: Expected results achieved

5.2.7 DA-01-USB

Test Case DA-01-USB DCCIDD Version 2.0	
Case Summary:	DA-01 Acquire a physical device using access interface AI 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.
Tester Name:	brl
Test Host:	JohnStone
Test Date:	Wed Sep 13 14:27:19 2006
Drives:	src(24-FU2) dst (20-FU2) other (none)
Source Setup:	src hash (SHA1): < A78EDB5E90298D0CDF199B4B62119F81208A252A > src hash (MD5): < 90311DDF672B8CBA0869A46F4A455A7E > 39070080 total sectors (20003880960 bytes) 19076/063/32 (max cyl/hd values) 19077/064/32 (number of cyl/hd) Model (ATCS04-0) serial # (CSH206D9DSEL)

Log Highlights:	Destination setup
	39070080 sectors wiped with 20
	
	Comparision of original to clone Drive
	Sectors compared: 39070080
	Sectors match: 39070080
	Sectors differ: 0
	Bytes differ: 0
	Diffs range
	0 source read errors, 0 destination read errors
	
	Hash Window 2000388096 bytes, Algorithms: MD5
	Block hashes from tool for MD5
	     1 9FA708CFF9599957118332A4138DA11AC
	     2 4392FA47D09ED9BE561E30F6E3CCC03D
	     3 CA396B233D5C272E8ACFE4F15988FCF7
	 . . .
	     8 C1D21372B22183F7F70D5D39F69FA34B
	     9 BE95A173D9283D8609659805C509916F
	   10 AC09CD51E6C6671D5D31EB9CF96B8C71
	Reference block hashes from source drive 24-FU2
	     1 9FA708CFF9599957118332A4138DA11AC
	     2 4392FA47D09ED9BE561E30F6E3CCC03D
	     3 CA396B233D5C272E8ACFE4F15988FCF7
	 . . .
	     8 C1D21372B22183F7F70D5D39F69FA34B
	     9 BE95A173D9283D8609659805C509916F
	   10 AC09CD51E6C6671D5D31EB9CF96B8C71
	Acquisition hash: 90311DDF672B8CBA0869A46F4A455A7E

Test Case DA-01-USB DCCIDD Version 2.0	
	Rehash of Source SHA1: A78EDB5E90298D0CDF199B4B62119F81208A252A
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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis:	Expected results achieved

5.2.8 DA-02-CF

Test Case DA-02-CF DCCIDD Version 2.0	
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.
Tester Name:	brl
Test Host:	Charlie
Test Date:	Fri Sep 15 14:08:04 2006
Drives:	src(C1-CF) dst (C2-CF) other (none)
Source Setup:	src hash (SHA256): < C7CF0218222DF80D5316511D6814266C7FA507C13F795AD3D323BB73C1590D80 > src hash (SHA1): < 5B8235178DF99FA307430C088F81746606638A0B > src hash (MD5): < 776DF8B4D2589E21DEBCF589EDC16D78 > 503808 total sectors (257949696 bytes) Model (CF) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other 2 P 168689522 1936028240 0288/115/43 0367/114/50 Boot 65 other 3 P 1869881465 1936028192 0366/032/33 0357/032/43 Boot 79 other 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 Highlights:	Destination setup
	503808 sectors wiped with C2
	
	Comparision 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
	
	Hash Window 100000 bytes, Algorithms: MD5 SHA1 SHA256
	Block hashes from tool for MD5
	      1 490F4B60B33916055444EBAF64DA8E60
	      2 0019D23BEF56A136A1891211D7007F6F
	      3 0019D23BEF56A136A1891211D7007F6F
	   . . .
	   2578 2E464114B17CF569550435739BEEF414
	   2579 4B47A08BE29F0ED2BBFD8026A754B610
	   2580 19B612C14A0BC56AE1104945C5BB7C8C
	Reference block hashes from source drive C1-CF

```
Test Case DA-02-CF DCCIDD Version 2.0
                 1  490F4B60B33916055444EBAF64DA8E60
                 2  0019D23BEF56A136A1891211D7007F6F
                 3  0019D23BEF56A136A1891211D7007F6F
              . . .
              2578  2E464114B17CF569550435739BEEF414
              2579  4B47A08BE29F0ED2BBFD8026A754B610
              2580  19B612C14A0BC56AE1104945C5BB7C8C
            Block hashes from tool for SHA1
                 1  68312F61C4A4D7DDF257ABDFABD3C8A7BD77DFA8
                 2  B98C6A155DC7A778874DFC6023BE2BACC2E495DD
                 3  B98C6A155DC7A778874DFC6023BE2BACC2E495DD
              . . .
              2578  AF3CF8BE8EDC8CE2348D592229FB673A5418D6D1
              2579  666824903349F3C0FDE8E9C2FF685251D746E485
              2580  1B28FC17E127B15EE0001A2C3C69AA4ACFA79888
            Reference block hashes from source drive C1-CF
                 1  68312F61C4A4D7DDF257ABDFABD3C8A7BD77DFA8
                 2  B98C6A155DC7A778874DFC6023BE2BACC2E495DD
                 3  B98C6A155DC7A778874DFC6023BE2BACC2E495DD
              . . .
              2578  AF3CF8BE8EDC8CE2348D592229FB673A5418D6D1
              2579  666824903349F3C0FDE8E9C2FF685251D746E485
              2580  1B28FC17E127B15EE0001A2C3C69AA4ACFA79888
            Block hashes from tool for SHA256
                 1  20B7E84CA5E32976BB0280A2086491AA4E3BA05E117689D2214DA348D79F74E1
                 2  9192C25B734FCBADBE32DADC28089C60DB0E39F90CC20CE2E5733F57261ACC0C
                 3  9192C25B734FCBADBE32DADC28089C60DB0E39F90CC20CE2E5733F57261ACC0C
              . . .
              2578  344B0AC1DB9CE02595788285167F13B4BD8C51F25BE6DD4F9555FCF968281F8D
              2579  70204081121A50B01F2D5A13369B135ECDE5565D8F30194601EAA80B3295F45C
              2580  CF681B791731C7074C55BAFDAB761D05395F581D39FC5EB24634DA126450B0C0
            Reference block hashes from source drive C1-CF
                 1  20B7E84CA5E32976BB0280A2086491AA4E3BA05E117689D2214DA348D79F74E1
                 2  9192C25B734FCBADBE32DADC28089C60DB0E39F90CC20CE2E5733F57261ACC0C
                 3  9192C25B734FCBADBE32DADC28089C60DB0E39F90CC20CE2E5733F57261ACC0C
              . . .
              2578  344B0AC1DB9CE02595788285167F13B4BD8C51F25BE6DD4F9555FCF968281F8D
              2579  70204081121A50B01F2D5A13369B135ECDE5565D8F30194601EAA80B3295F45C
              2580  CF681B791731C7074C55BAFDAB761D05395F581D39FC5EB24634DA126450B0C0
            Acquisition hash:  776DF8B4D2589E21DEBCF589EDC16D78
            5B8235178DF99FA307430C088F81746606638A0B
            C7CF0218222DF80D5316511D6814266C7FA507C13F795AD3D323BB73C1590D80

            Rehash of Source SHA1: 5B8235178DF99FA307430C088F81746606638A0B
```

	Assertion & Expected Result	Actual Result
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-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.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.9 DA-02-F12

Test Case DA-02-F12 DCCIDD Version 2.0	
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.
Tester Name:	brl
Test Host:	McCloud
Test Date:	Tue Sep 26 16:01:06 2006
Drives:	src(43) dst (71) other (none)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43F12 md5sum 16418303 CBA0C9984F51778E89DEF0C6BED06864 43F12 sha1sum 16418303 6853B517F50BF3CCADED3DB5FEAE08C18C62FCA0 43F12 sha256sum 16418303 70AF38479F8384CD7457AA6CE0C255B3C6AFB1FA65F9C2C2DD285F38EE4AD8E2

```
Test Case DA-02-F12 DCCIDD Version 2.0

Log          Destination setup
Highlights:  80418240 sectors wiped with 71
             Comparision of original to clone Partition
             Sectors compared:        32067
             Sectors match:           32067
             Sectors differ:              0
             Bytes differ:                0
             Diffs range:
             run start Tue Sep 26 16:15:36 2006
             run finish Tue Sep 26 16:15:49 2006
             elapsed time 0:0:13
             Normal exit
             Hash Window 512 bytes, Algorithms: MD5 SHA1 SHA256
             Block hashes from tool for MD5
                   1  4C42CFDF8692C879182616AE8D65C735
                   2  F018E29C0F7EB9482D513E2E4C4396BB
                   3  F018E29C0F7EB9482D513E2E4C4396BB
                . . .
              32065  EA81BAAA271A63DD654A61440C030B39
              32066  FF4E17CB6509C5645DCB62480D262839
              32067  0A50B6227BED950D769D860A082922F4
             Reference block hashes from source drive 43
                   1  4C42CFDF8692C879182616AE8D65C735
                   2  F018E29C0F7EB9482D513E2E4C4396BB
                   3  F018E29C0F7EB9482D513E2E4C4396BB
                . . .
              32065  EA81BAAA271A63DD654A61440C030B39
              32066  FF4E17CB6509C5645DCB62480D262839
              32067  0A50B6227BED950D769D860A082922F4
             Block hashes from tool for SHA1
                   1  D8EDA931D6B87C1E970BE64F5A251CA80FD308FB
                   2  92BB4CF0F8BDB935052E80D4BECE2AF368D2D141
                   3  92BB4CF0F8BDB935052E80D4BECE2AF368D2D141
                . . .
              32065  D9038E86EF7C94F658876559B30632CABBAD2066
              32066  72F93F925E4254F73D063AF3028D079727113001
              32067  D5D647F735C9564E62C29FBC32FC599683BA91AE
             Reference block hashes from source drive 43
                   1  D8EDA931D6B87C1E970BE64F5A251CA80FD308FB
                   2  92BB4CF0F8BDB935052E80D4BECE2AF368D2D141
                   3  92BB4CF0F8BDB935052E80D4BECE2AF368D2D141
                . . .
              32065  D9038E86EF7C94F658876559B30632CABBAD2066
              32066  72F93F925E4254F73D063AF3028D079727113001
              32067  D5D647F735C9564E62C29FBC32FC599683BA91AE
             Block hashes from tool for SHA256
                   1  88672C380D0791A7862B54344005CCCD42D30EDEACDE0B8B497723D4ADE1A0FF
                   2  B140168E270A194660D4ECB93BBD23892CFA96A2CCD38CFB9959FD0F0DA91DB6
                   3  B140168E270A194660D4ECB93BBD23892CFA96A2CCD38CFB9959FD0F0DA91DB6
                . . .
              32065  CD9BF17D23E981ED32051ACF175ED68E3B468923171354820F6CC82362EB8535
              32066  BB42C6EDA0EC74D953F92F5810F7C808D9326ED413C7EEE31F4C8D2E0F048D6F
              32067  8DFF0345E6576D8931401E96E2492480E3FE05AEC98FCD93ACFBA060C90821A7
             Reference block hashes from source drive 43
                   1  88672C380D0791A7862B54344005CCCD42D30EDEACDE0B8B497723D4ADE1A0FF
                   2  B140168E270A194660D4ECB93BBD23892CFA96A2CCD38CFB9959FD0F0DA91DB6
                   3  B140168E270A194660D4ECB93BBD23892CFA96A2CCD38CFB9959FD0F0DA91DB6
                . . .
              32065  CD9BF17D23E981ED32051ACF175ED68E3B468923171354820F6CC82362EB8535
              32066  BB42C6EDA0EC74D953F92F5810F7C808D9326ED413C7EEE31F4C8D2E0F048D6F
              32067  8DFF0345E6576D8931401E96E2492480E3FE05AEC98FCD93ACFBA060C90821A7
             Acquisition hash: CBA0C9984F51778E89DEF0C6BED06864
             6853B517F50BF3CCADED3DB5FEAE08C18C62FCA0
             70AF38479F8384CD7457AA6CE0C255B3C6AFB1FA65F9C2C2DD285F38EE4AD8E2

             Rehash of Source SHA1: 888E2E7F7AD237DC7A732281DD93F325065E5871

Results:
             Assertion & Expected Result                    Actual Result
```

Test Case DA-02-F12 DCCIDD Version 2.0		
	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-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.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.10 DA-02-F16

Test Case DA-02-F16 DCCIDD Version 2.0	
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.
Tester Name:	brl
Test Host:	McCloud
Test Date:	Mon Oct 2 15:05:14 2006
Drives:	src(43) dst (6B) other (none)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43F16 md5sum 1077479423 37E81FFB31C3CB38AA48B2237500908E 43F16 sha1sum 1077479423 443CCEC9A22F726DAF6CE384817151C83B3EBC8B 43F16 sha256sum 1077479423 EFEF3731BCFBB1F7B279FA813FE47CA8DD90E24D8BF89D4CE7BA6D1C93E5CA51

```
Test Case DA-02-F16 DCCIDD Version 2.0

Log          Destination setup
Highlights:  156301488 sectors wiped with 6B
             Comparision of original to clone Partition
             Sectors compared:      2104452
             Sectors match:         2104452
             Sectors differ:               0
             Bytes differ:                 0
             Diffs range:
             Source (2104452) has 224910 fewer sectors than destination (2329362)
             Zero fill:     0
             Src Byte fill (43): 0
             Dst Byte fill (6B): 224910
             Other fill:    0
             Other no fill: 0
             Zero fill range:
             Src fill range:
             Dst fill range:  2104452-2329361
             Other fill range:
             Other not filled range:
             run start Mon Oct  2 15:38:50 2006
             run finish Mon Oct  2 15:51:53 2006
             elapsed time 0:13:3
             Normal exit
             Hash Window 10000000 bytes, Algorithms: MD5 SHA1 SHA256
             Block hashes from tool for MD5
                   1  AB7656692E38931509952710C6619E11
                   2  950EF9D0E139A5A36ED0B9A65DF3BFF3
                   3  C026D4D027A1C09B9DDACDEA77861113
                 . . .
                 106  1E742D99C8F24901D64D0BAC8E3AF5BC
                 107  D78CACA6D61F0FBE37C36A09E9F978E5
                 108  B9116B0955123D4FC7ADAD33E729D798
             Reference block hashes from source drive 43
                   1  AB7656692E38931509952710C6619E11
                   2  950EF9D0E139A5A36ED0B9A65DF3BFF3
                   3  C026D4D027A1C09B9DDACDEA77861113
                 . . .
                 106  1E742D99C8F24901D64D0BAC8E3AF5BC
                 107  D78CACA6D61F0FBE37C36A09E9F978E5
                 108  B9116B0955123D4FC7ADAD33E729D798
             Block hashes from tool for SHA1
                   1  8D09B04E0F9EC9B263379206F42CF3870BDB2BB2
                   2  E5530225372B9A128FC44E12081295653B2D146D
                   3  37E69A28DB2583C5B5E1C7D485DD875EDB03BA7D
                 . . .
                 106  832B1316FA221E7BDC7B07FCAFE288015B3449CD
                 107  BE185B4144D9D69164FC2805959E67C7E98E719F
                 108  94A2CC31FAC5A3EB8CFB3014BA3C4D5A26EC611F
             Reference block hashes from source drive 43
                   1  8D09B04E0F9EC9B263379206F42CF3870BDB2BB2
                   2  E5530225372B9A128FC44E12081295653B2D146D
                   3  37E69A28DB2583C5B5E1C7D485DD875EDB03BA7D
                 . . .
                 106  832B1316FA221E7BDC7B07FCAFE288015B3449CD
                 107  BE185B4144D9D69164FC2805959E67C7E98E719F
                 108  94A2CC31FAC5A3EB8CFB3014BA3C4D5A26EC611F
             Block hashes from tool for SHA256
                   1  C70AF14F4246C12F07BB0836BFD0D5F2D18C17336C276D7F85DFF706690FDC0B
                   2  0285F822FAECA3B1CEBB29371327380F8AEA43D3F225CE518D8016A366A1D2D0
                   3  C8B116FFF5E614409B7B9B2D499505D75FEA46ADF589CFF5C18668E54DC8FF1C
                 . . .
                 106  4F6DCDC4122C6F35DC94F7889D4758606F76DFBE7A5BE0B256C7EB0CEA30894A
                 107  98743E7451183DDD86FED38D93D534EAC6E18F78A02D830913E1315E2C41D109
                 108  FBA2F8C44A4F8E1AEFCA51CCDC8B9B74178E18FBC006CFBA20DAD97A153B3529
             Reference block hashes from source drive 43
                   1  C70AF14F4246C12F07BB0836BFD0D5F2D18C17336C276D7F85DFF706690FDC0B
                   2  0285F822FAECA3B1CEBB29371327380F8AEA43D3F225CE518D8016A366A1D2D0
                   3  C8B116FFF5E614409B7B9B2D499505D75FEA46ADF589CFF5C18668E54DC8FF1C
                 . . . .
```

```
Test Case DA-02-F16 DCCIDD Version 2.0
           106  4F6DCDC4122C6F35DC94F7889D4758606F76DFBE7A5BE0B256C7EB0CEA30894A
           107  98743E7451183DDD86FED38D93D534EAC6E18F78A02D830913E1315E2C41D109
           108  FBA2F8C44A4F8E1AEFCA51CCDC8B9B74178E18FBC006CFBA20DAD97A153B3529
      Acquisition hash: 37E81FFB31C3CB38AA48B2237500908E
      443CCEC9A22F726DAF6CE384817151C83B3EBC8B
      EFEF3731BCFBB1F7B279FA813FE47CA8DD90E24D8BF89D4CE7BA6D1C93E5CA51

      Rehash of Source SHA1: 888E2E7F7AD237DC7A732281DD93F325065E5871
```

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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Results:

Analysis: Expected results achieved

5.2.11 DA-02-F32

Test Case DA-02-F32 DCCIDD Version 2.0	
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.
Tester Name:	brl
Test Host:	McCloud
Test Date:	Fri Sep 29 17:44:29 2006
Drives:	src(43) dst (6B) other (none)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43F32 md5sum 4301789183 2C4D8D450E5AD28329F616D87114CCFE
Log	Destination setup

```
Test Case DA-02-F32 DCCIDD Version 2.0
Highlights:  156301488 sectors wiped with 6B
             Comparision of original to clone Partition
             Sectors compared:      8401932
             Sectors match:         8401932
             Sectors differ:              0
             Bytes differ:                0
             Diffs range:
             Source (8401932) has 851445 fewer sectors than destination (9253377)
             Zero fill:     0
             Src Byte fill (43): 0
             Dst Byte fill (6B): 851445
             Other fill:    0
             Other no fill: 0
             Zero fill range:
             Src fill range:
             Dst fill range:  8401932-9253376
             Other fill range:
             Other not filled range:
             run start Mon Oct  2 10:19:09 2006
             run finish Mon Oct  2 11:10:19 2006
             elapsed time 0:51:10
             Normal exit
             Hash Window 430178919 bytes, Algorithms: MD5
             Block hashes from tool for MD5
                  1 6799A7A403AAC0B756BD83B11CE4C642
                  2 33301322C11AA623A164D84519C5F5D9
                  3 F79ADA4DE92DB7157C3D2622A56D95C5
               . . .
                  8 4ED205EC5A29C36455E76B2BBAA5766F
                  9 61EA91577B8D062128177F7C551BF07C
                 10 B18B8DC672460439219A34500F24C77D
             Reference block hashes from source drive 43
                  1 6799A7A403AAC0B756BD83B11CE4C642
                  2 33301322C11AA623A164D84519C5F5D9
                  3 F79ADA4DE92DB7157C3D2622A56D95C5
               . . .
                  8 4ED205EC5A29C36455E76B2BBAA5766F
                  9 61EA91577B8D062128177F7C551BF07C
                 10 B18B8DC672460439219A34500F24C77D
             Acquisition hash: 2C4D8D450E5AD28329F616D87114CCFE

             Rehash of Source SHA1: 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-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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis: Expected results achieved

5.2.12   DA-02-F32X

Test Case DA-02-F32X DCCIDD Version 2.0	
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.
Tester Name:	brl
Test Host:	McCloud
Test Date:	Tue Sep 19 18:25:47 2006
Drives:	src(43) dst (71) other (none)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43F32x sha1sum 10742183423 379C1AC47AF956FC8C80389C2A7427A7F8FB4E89
Log Highlights:	Destination setup 80418240 sectors wiped with 71

```
Test Case DA-02-F32X DCCIDD Version 2.0
          Comparision of original to clone Partition
          Sectors compared:      20980827
          Sectors match:         20980827
          Sectors differ:               0
          Bytes differ:                 0
          Diffs range:
          run start Wed Sep 20 12:14:26 2006
          run finish Wed Sep 20 14:16:20 2006
          elapsed time 2:1:54
          Normal exit
          Hash Window 1074218343 bytes, Algorithms: SHA1
          Block hashes from tool for SHA1
                1  EB76865D7A006E0D73690F1BB2C35E19785CED41
                2  288CB346D8C36A784CC646F1D68F3C5BB3BB6E90
                3  8DF7991A42629D7A9B46E88443B7A36EC0533317
            . . .
                8  22BCB502EF527C91BA671E6A74F8534086CF8F85
                9  36EEB724AFAB46E73CEA91A346E5544CC175BBE2
               10  2BCFDFDA014018E8C916A662924AAF800D41774F
          Reference block hashes from source drive 43
                1  EB76865D7A006E0D73690F1BB2C35E19785CED41
                2  288CB346D8C36A784CC646F1D68F3C5BB3BB6E90
                3  8DF7991A42629D7A9B46E88443B7A36EC0533317
            . . .
                8  22BCB502EF527C91BA671E6A74F8534086CF8F85
                9  36EEB724AFAB46E73CEA91A346E5544CC175BBE2
               10  2BCFDFDA014018E8C916A662924AAF800D41774F
          Acquisition hash: 379C1AC47AF956FC8C80389C2A7427A7F8FB4E89

          Rehash of Source SHA1: 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-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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis: Expected results achieved

5.2.13 DA-02-NT

Test Case DA-02-NT DCCIDD Version 2.0	
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.
Tester Name:	brl
Test Host:	Paladin
Test Date:	Tue Dec 26 12:50:31 2006
Drives:	src(01) dst (7B) other (none)

Source Setup:	src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 >
	 src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E >
	 78165360 total sectors (40020664320 bytes)
	 Model (0BB-00JHC0) serial # (WD-WMAMC74171)
	  N Start LBA Length Start C/H/S End C/H/S boot Partition type
	  1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X
	  2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended
	  3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12
	  4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended
	  5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16
	  6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended
	  7 S 000000063 004192902 1023/001/01 1023/254/63 16 other
	  8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended
	  9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32
	 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended
	 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux
	 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended
	 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap
	 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended
	 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS
	 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 18 P 000000000 000000000 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 027744192 sectors 14205026304 bytes
	
	 Partition Hashes
	 01NT-sha256 14205026303
	 65FCD168163625E5EB74255B2A981B6F1C9D6259AF8A0851369101986A7ABC09
	 Excess destination partition sectors hash:
	 CMD: ./machash.csh DA-02-NT Max brl /dev/sdf5 7B -before -winsize

Test Case DA-02-NT DCCIDD Version 2.0	
	14205026304 –new_log
	SHA1 0 – 14205026303 = 30933227110A33626AAA1057D9FF3B9B6BD24DA5
	SHA1 14205026304 – 15627999743 = 3053D893D5A519D9F761DC3EEBEB87AE503A8F40
Log Highlights:	Destination setup
	78177792 sectors wiped with 7B
	Comparision of original to clone Partition
	Sectors compared: 27744192
	Sectors match: 27744192
	Sectors differ: 0
	Bytes differ: 0
	Diffs range:
	Source (27744192) has 2779245 fewer sectors than destination (30523437)
	Zero fill: 0
	Src Byte fill (01): 0
	Dst Byte fill (7B): 2779244
	Other fill: 0
	Other no fill: 1
	Zero fill range:
	Src fill range:
	Dst fill range: 27744192-30523435
	Other fill range:
	Other not filled range: 30523436
	run start Tue Dec 26 14:37:17 2006
	run finish Tue Dec 26 16:20:20 2006
	elapsed time 1:43:3
	Normal exit
	Hash Window 1420502631 bytes, Algorithms: SHA256
	Block hashes from tool for SHA256
	1 0075FF881D953AE3630269E4464E6757B3B674ADAF7EE68C66858EF8D41D0F96
	2 ADE6AF9D1682050075191EA570329F8E24031AABD028B1B4C9D1E2BDC9D9F9A2
	3 DBF2B0DB262450A97DA95402DC58436323BBDAAB2DC3128A0EC64999CD119498
	. . .
	8 95FDDA5F0269A52D62BB6F0B407710267965853EAAEA92C49102F0922CBBA190
	9 CFD40F0A9BCC57DCEFEE421A435669FC8001CC0F96234A46FAA931BBB1C7ED93
	10 5100F8502947F0B1DBB5D871E023B069E86516CA767710AA10EE94A4EF59C572
	Reference block hashes from source drive 01
	1 0075FF881D953AE3630269E4464E6757B3B674ADAF7EE68C66858EF8D41D0F96
	2 ADE6AF9D1682050075191EA570329F8E24031AABD028B1B4C9D1E2BDC9D9F9A2
	3 DBF2B0DB262450A97DA95402DC58436323BBDAAB2DC3128A0EC64999CD119498
	. . .
	8 95FDDA5F0269A52D62BB6F0B407710267965853EAAEA92C49102F0922CBBA190
	9 CFD40F0A9BCC57DCEFEE421A435669FC8001CC0F96234A46FAA931BBB1C7ED93
	10 5100F8502947F0B1DBB5D871E023B069E86516CA767710AA10EE94A4EF59C572
	Acquisition hash:
	65FCD168163625E5EB74255B2A981B6F1C9D6259AF8A08513691019B6A7ABC09
	Excess destination partition sectors hash:
	CMD: ./machash.csh DA-02-NT Max brl /dev/sdf5 7B –after –winsize
	14205026304 –new_log
	SHA1 0 – 14205026303 = 0FBA4C36295CB9622CD815577429C3A588C34D09
	SHA1 14205026304 – 15627999743 = 3053D893D5A519D9F761DC3EEBEB87AE503A8F40
	Rehash of Source SHA1: A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9
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.	as expected
AO-23 Logged information is correct.	as expected

Test Case DA-02-NT DCCIDD Version 2.0		
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.14   DA-02-SWAP

Test Case DA-02-SWAP DCCIDD Version 2.0	
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.
Tester Name:	brl
Test Host:	McCloud
Test Date:	Wed Sep 27 11:00:48 2006
Drives:	src(43) dst (71) other (none)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43swap md5sum 2154991103 4B602964A30FE20D1B22B046A7375A7C 43swap sha1sum 2154991103 F5B062CC31DA088DF7FAF8F7A47E500BF4244BCF
Log	Destination setup

```
Test Case DA-02-SWAP DCCIDD Version 2.0
Highlights:    80418240 sectors wiped with 71
               Comparision of original to clone Partition
               Sectors compared:      4208967
               Sectors match:         4208967
               Sectors differ:               0
               Bytes differ:                 0
               Diffs range:
               run start Wed Sep 27 14:58:15 2006
               run finish Wed Sep 27 15:22:43 2006
               elapsed time 0:24:28
               Normal exit
               Hash Window 215499111 bytes, Algorithms: MD5 SHA1
               Block hashes from tool for MD5
                     1  F642CA429C3BBDF67960BAECF3E925B2
                     2  2E906761FB00C5A49723A25B497B10B6
                     3  406E76A8111E6236675733BC501F154E
                  . . .
                     8  1A90D19475EE5484E345876883665BFE
                     9  7BDE3BC25C21379225D7CBAE820A92B1
                    10  63AEDBB8903F6A8EAC75791980D4B575
               Reference block hashes from source drive 43
                     1  F642CA429C3BBDF67960BAECF3E925B2
                     2  2E906761FB00C5A49723A25B497B10B6
                     3  406E76A8111E6236675733BC501F154E
                  . . .
                     8  1A90D19475EE5484E345876883665BFE
                     9  7BDE3BC25C21379225D7CBAE820A92B1
                    10  63AEDBB8903F6A8EAC75791980D4B575
               Block hashes from tool for SHA1
                     1  2C1CB487A2EF7A8820C02CE81C20AAD5697EE837
                     2  AA57F611BB7CC759423C6DBBABC7AACCCFFD086A
                     3  1CD836A992E2576E719E66B53DEE42C93AB40F11
                  . . .
                     8  A23EE0472976722D27F34730111334992D0B49A0
                     9  F1E1811AB1215618DB5CC6C8EE4E669C5495AFE8
                    10  6BAD320AC9E7DE6920E20AFCF0679A618803D8A6
               Reference block hashes from source drive 43
                     1  2C1CB487A2EF7A8820C02CE81C20AAD5697EE837
                     2  AA57F611BB7CC759423C6DBBABC7AACCCFFD086A
                     3  1CD836A992E2576E719E66B53DEE42C93AB40F11
                  . . .
                     8  A23EE0472976722D27F34730111334992D0B49A0
                     9  F1E1811AB1215618DB5CC6C8EE4E669C5495AFE8
                    10  6BAD320AC9E7DE6920E20AFCF0679A618803D8A6
               Acquisition hash: 4B602964A30FE20D1B22B046A7375A7C
               F5B062CC31DA088DF7FAF8F7A47E500BF4244BCF

               Rehash of Source SHA1: 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-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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis: Expected results achieved

5.2.15 DA-02-THUMB

Test Case DA-02-THUMB DCCIDD Version 2.0	
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.
Tester Name:	brl
Test Host:	Charlie
Test Date:	Fri Sep 15 14:41:22 2006
Drives:	src(D2-THUMB) dst (D3-THUMB) other (none)

Source Setup:	src hash (SHA256): < ECA93D932C8069B03C36E5AD99A163688C2A6313421D843F46E675567777E8C7 >
	 src hash (SHA1): < 712C9F59F598745977E4E19F235F83CE8F4EC7BA >
	 src hash (MD5): < EA06F74BE51D0730B3F7079D7A3D5AE8 >
	 253400 total sectors (129740800 bytes)
	 Model (TS128MJFLASHA) serial # ()
	  N Start LBA Length Start C/H/S End C/H/S boot Partition type
	  1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other
	  2 P 168689522 1936028240 0288/115/43 0367/114/50 Boot 65 other
	  3 P 1869881465 1936028192 0366/032/33 0357/032/43 Boot 79 other
	  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 Highlights:	Destination setup
	 253400 sectors wiped with 0
	
	 Comparision of original to clone Drive
	 Sectors compared: 253400
	 Sectors match: 253400
	 Sectors differ: 0
	 Bytes differ: 0
	 Diffs range
	 0 source read errors, 0 destination read errors
	
	 Hash Window 8000 bytes, Algorithms: MD5 SHA1 SHA256
	 Block hashes from tool for MD5
	     1 CDE69E2068262BE4B7B9983898E4B60D
	     2 58101249C76B735BD74CE5302B009317
	     3 94F8BC2494D2E3D97254D61F99078A3B
	  . . .
	 16216 7989E05E83AACD90A091AAC2ACA4F8A4
	 16217 200C4EAF7206028F6C68EC24CDAB5CAD
	 16218 B137B7AE1D9D7AD454C762FF9943CB2E
	 Reference block hashes from source drive D2-THUMB

```
Test Case DA-02-THUMB DCCIDD Version 2.0
         1  CDE69E2068262BE4B7B9983898E4B60D
         2  58101249C76B735BD74CE5302B009317
         3  94F8BC2494D2E3D97254D61F99078A3B
      . . .
     16216  7989E05E83AACD90A091AAC2ACA4F8A4
     16217  200C4EAF7206028F6C68EC24CDAB5CAD
     16218  B137B7AE1D9D7AD454C762FF9943CB2E
  Block hashes from tool for SHA1
         1  7ECA8513C1D1337AEE679E8DC192375F7E1F637A
         2  75A289EEC0A33499FBAA6E89081C0EFA604FBDD4
         3  D0F795061DF308677BDDFEAA91360C9BA6B4F066
      . . .
     16216  85CDEAB1F5793FCFD1F0F9F1534D885824F5D632
     16217  736F9F375C9F5F1E3207654F7A650D8F7E491807
     16218  DB62FA536CA59A7270CDF4B45D3097FA6CFEB8C9
  Reference block hashes from source drive D2-THUMB
         1  7ECA8513C1D1337AEE679E8DC192375F7E1F637A
         2  75A289EEC0A33499FBAA6E89081C0EFA604FBDD4
         3  D0F795061DF308677BDDFEAA91360C9BA6B4F066
      . . .
     16216  85CDEAB1F5793FCFD1F0F9F1534D885824F5D632
     16217  736F9F375C9F5F1E3207654F7A650D8F7E491807
     16218  DB62FA536CA59A7270CDF4B45D3097FA6CFEB8C9
  Block hashes from tool for SHA256
         1  821D48E67962FD78815531E60BB88F4E1743BC9A081CE11DC4407B74F280ECE2
         2  668946BAB9868B28489BB906205EE1026045C8BCD3CA62A1BDF733C65491351B
         3  CA27BD348D35BA6ECFEBC2F49227AFD0CF77D54BE0B26BB038B1526A6CA36869
      . . .
     16216  D3FD0FCBBA79B7DCF5C364ADE447B6481ABBA6908E23340E1433B841D3EE7277
     16217  60C157A734C4C46335DE3455BF25D7567A0FB34E1F47BCF9A290F440545C2475
     16218  629A2FEAAD92D79EB882F203D57C8B342C139905854F6B46FACED9315265636A
  Reference block hashes from source drive D2-THUMB
         1  821D48E67962FD78815531E60BB88F4E1743BC9A081CE11DC4407B74F280ECE2
         2  668946BAB9868B28489BB906205EE1026045C8BCD3CA62A1BDF733C65491351B
         3  CA27BD348D35BA6ECFEBC2F49227AFD0CF77D54BE0B26BB038B1526A6CA36869
      . . .
     16216  D3FD0FCBBA79B7DCF5C364ADE447B6481ABBA6908E23340E1433B841D3EE7277
     16217  60C157A734C4C46335DE3455BF25D7567A0FB34E1F47BCF9A290F440545C2475
     16218  629A2FEAAD92D79EB882F203D57C8B342C139905854F6B46FACED9315265636A
  Acquisition hash: EA06F74BE51D0730B3F7079D7A3D5AE8
  712C9F59F598745977E4E19F235F83CE8F4EC7BA
  ECA93D932C8069B03C36E5AD99A163688C2A6313421D843F46E675567777E8C7

  Rehash of Source SHA1: 712C9F59F598745977E4E19F235F83CE8F4EC7BA
```

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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis: Expected results achieved

5.2.16   DA-02-X2

Test Case DA-02-X2 DCCIDD Version 2.0	
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.
Tester Name:	brl
Test Host:	AndWife
Test Date:	Mon Dec 25 09:32:30 2006
Drives:	src(43) dst (8A) other (none)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43x2 md5sum 5371075583 C7A84DE9ACBCB05463604CE8823D0874 43x2 sha256sum 5371075583 61F0030EDB667BA43A26A24A9A25281817537D2261D687F7EDCB32B5E60E39E7 Excess destination partition sectors hash:

Test Case DA-02-X2 DCCIDD Version 2.0	
	CMD: ./machash.csh DA-02-X2 Max brl /dev/sdb5 8A -before -winsize 5371075584 -new_log SHA1 0 - 5371075583 = 796F5CB694EB176A3DC9BB3E5841015453BB0795 SHA1 5371075584 - 6201828863 = 1B4C631F8D04C131D033A3B23EB4ECD1E93E45C0

Log Highlights:	Destination setup
	39102336 sectors wiped with 8A
	Comparision of original to clone Partition
	Sectors compared: 10490382
	Sectors match: 10490382
	Sectors differ: 0
	Bytes differ: 0
	Diffs range:
	Source (10490382) has 1622565 fewer sectors than destination (12112947)
	Zero fill: 50984
	Src Byte fill (43): 0
	Dst Byte fill (8A): 1566531
	Other fill: 100
	Other no fill: 4950
	Zero fill range: 10502147, 10502195, 10502197, 10502200-10502711,
	10518531, 10518579, 10518581, 10518584-10519095, 10534915,
	10534963, 10534965, 10534968-10535479, 10551299, 10551347,
	10551349, 10551352-10551863, 10567683, 10567731, 10567733,
	10567736-10568247. . . + 48409 more
	Src fill range:
	Dst fill range: 10490382-10502145, 10502712-10518529,
	10519096-10534913, 10535480-10551297, 10551864-10567681,
	10568248-10584065, 10584632-10600449, 10601016-10616833,
	10617400-10633217, 10633784-10649601, 10650168-10665985,
	10666552-10682369, 10682936-10698753, 10699320-10715137,
	10715704-10731521, 10732088-10747905, 10748472-10764289,
	10764856-10780673, 10781240-10797057, 10797624-10813441. . . + 1254225 more
	Other fill range: 10502199, 10518583, 10534967, 10551351,
	10567735, 10584119, 10600503, 10616887, 10633271, 10649655,
	10666039, 10682423, 10698807, 10715191, 10731575, 10747959,
	10764343, 10780727, 10797111, 10813495. . . + 80 more
	Other not filled range: 10502146, 10502148-10502194,
	10502196, 10502198, 10518530, 10518532-10518578, 10518580,
	10518582, 10534914, 10534916-10534962, 10534964, 10534966,
	10551298, 10551300-10551346, 10551348, 10551350, 10567682,
	10567684-10567730, 10567732, 10567734. . . + 4700 more
	run start Sun Dec 24 16:51:52 2006
	run finish Sun Dec 24 17:10:53 2006
	elapsed time 0:19:1
	Normal exit
	Hash Window 537107559 bytes, Algorithms: MD5 SHA256
	Block hashes from tool for MD5
	      1 E6839D26EA376FBD35AE7363937A3EF1
	      2 3C0D17730CCC2EE72A4144FAC965464C
	      3 58EEA095F179FA10F3EE84A1934CDA64
	   . . .
	      8 CE84A89306B5B6CA3401C9614DA13A99
	      9 007105B7B00C27D087F1A9CA1A732439
	     10 FFFA343773E3426255D748054C55E87B
	Reference block hashes from source drive 43
	      1 E6839D26EA376FBD35AE7363937A3EF1
	      2 3C0D17730CCC2EE72A4144FAC965464C
	      3 58EEA095F179FA10F3EE84A1934CDA64
	   . . .
	      8 CE84A89306B5B6CA3401C9614DA13A99
	      9 007105B7B00C27D087F1A9CA1A732439
	     10 FFFA343773E3426255D748054C55E87B
	Block hashes from tool for SHA256
	      1 E456BD80B628E80BD1FDFB9B6F0935AB2DC28238E39E0C5F36F1EBF9ECE1FD44
	      2 05E217D42B6A00CB157B60644950C33630CF0B3160A2D9AA76E77DB8CD5B37B6
	      3 9D0C693F7EA3A351A815F3D484232E9832ABF36016D8CD680D6270457300F168
	   . . .
	      8 F2EE9EB8EC51B749D96582065D763DEF151497588FBCFBD218C15771F1A38293
	      9 57ED0901C294FDDE7D04FC06B2EC123463C3D0B744E40B469147610358AF1974
	     10 754B6D9E3D71058B3739E4BEF73B39541222218B3C6D60C713C2E60917CFE24F

Test Case DA-02-X2 DCCIDD Version 2.0	
	Reference block hashes from source drive 43
	1 E456BD80B628E80BD1FDFB9B6F0935AB2DC28238E39E0C5F36F1EBF9ECE1FD44
	2 05E217D42B6A00CB157B60644950C33630CF0B3160A2D9AA76E77DB8CD5B37B6
	3 9D0C693F7EA3A351A815F3D484232E9832ABF36016D8CD680D6270457300F168
	. . .
	8 F2EE9EB8EC51B749D96582065D763DEF151497588FBCFBD218C15771F1A38293
	9 57ED0901C294FDDE7D04FC06B2EC123463C3D0B744E40B469147610358AF1974
	10 754B6D9E3D71058B3739E4BEF73B39541222218B3C6D60C713C2E60917CFE24F
	Acquisition hash: C7A84DE9ACBCB05463604CE8823D0874
	61F0030EDB667BA43A26A24A9A25281817537D2261D687F7EDCB32B5E60E39E7
	Excess destination partition sectors hash:
	CMD: ./machash.csh DA-02-X2 Max brl /dev/sdb5 8A -after -winsize 5371075584
	-new_log
	SHA1 0 - 5371075583 = 283BCC32DE892C12C37698AF7E38703619E57F57
	SHA1 5371075584 - 6201828863 = 1B4C631F8D04C131D033A3B23EB4ECD1E93E45C0
	Rehash of Source SHA1: 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-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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis:	Expected results achieved

5.2.17   DA-04

Test Case DA-04 DCCIDD Version 2.0	
Case Summary:	DA-04 Acquire a physical device to a truncated 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-19 If there is insufficient space to create a 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 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 Name:	brl
Test Host:	Max
Test Date:	Thu Dec 14 10:28:39 2006
Drives:	src(41) dst (69) other (none)
Source Setup:	src hash (SHA256): < FBF3AA21489653D880FFAE71449A9F7E8EE4F56A6C3BF58A3A3FFB13203F1B1D > src hash (SHA1): < 15CAA1A307271160D8372668BF8A03FC45A51CC9 > src hash (MD5): < 0A6A8EF78BDC14E2026710D8CCB5607C > 78125000 total sectors (40000000000 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 078107967 sectors 39991279104 bytes

Log Highlights:	Destination setup
	19925880 sectors wiped with 69
	
	Message displayed by tool
	19925760 blocks (9729 Mb) written.
	dccidd: writing `/dev/hdb': No space left on device
	19925881+0 records in
	19925880+0 records out
	Comparision of original to clone Drive
	Sectors compared: 19925880
	Sectors match: 19925880
	Sectors differ: 0
	Bytes differ: 0
	Diffs range
	Source (78125000) has 58199120 more sectors than destination (19925880)
	0 source read errors, 0 destination read errors
	
	Hash Window 7812500 bytes, Algorithms: MD5 SHA256
	Block hashes from tool for MD5
	     1 3A9A5C8B0F2A7946FC3C16DFBCB90DC3
	     2 3F938F0FFF982E369F5FC299222E2A5F

```
        3  91256F5BA4F0C5CEA90DF23D5A0C8204
     . . .
    1303  57416DB7CFCF6C1EED4B0024CCA0A236
    1304  85F74275523826552FB59CE37565881A
    1305  2A10B69DB18DA1C3DFE0B138E318D4E9
Reference block hashes from source drive 41
        1  3A9A5C8B0F2A7946FC3C16DFBCB90DC3
        2  3F938F0FFF982E369F5FC299222E2A5F
        3  91256F5BA4F0C5CEA90DF23D5A0C8204
     . . .
    5118  D21BEEAC01D1D8ABF549A3D52609DA11
    5119  85BA27B05C255FDEFDB30C48E164972A
    5120  987ED61480BEE01848754A763852F95E
Block hashes from tool for SHA256
        1  70CB211D5A579784D1A77B4A017350E788387F850A3274D9A5826B797300D227
        2  3F22388AB1732DB4EAD46E929AE85D235843BF3E5D2FD4322D8C62120A0668F4
        3  1871A45783E1F1C3B0A596A510387B09909ABE0CC72D3BBCF53049C3F5B8D9D0
     . . .
    1303  750BDB350F0C979C84832DD77BCB4CC79EBCB410043A973715FE9797FCEDAE69
    1304  7A9B2DDE861A4811F7D8DD1552057D29ACA78C7E6A0CCAA470C3989635DBC84E
    1305  45B21E1BDF967BA0EC5EFCDB1B3D4BC3098AE6646F3CDE0826828FE2D3F963B2
Reference block hashes from source drive 41
        1  70CB211D5A579784D1A77B4A017350E788387F850A3274D9A5826B797300D227
        2  3F22388AB1732DB4EAD46E929AE85D235843BF3E5D2FD4322D8C62120A0668F4
        3  1871A45783E1F1C3B0A596A510387B09909ABE0CC72D3BBCF53049C3F5B8D9D0
     . . .
    5118  5BA56973A8A0FE440E2C2E718DA73B81F0FC6EC8A02050D0E144145754B9C3A4
    5119  C7C9B1ED2B5E491979FB9CFD1E976C991D3DA9FC45C03D8515271ECAE2D6486C
    5120  1A0FD5FC32CE152FAF33C0058EA823E9335C6E8A3A0574815534DF17282E3034
Acquisition hash:
Rehash of Source SHA1: 15CAA1A307271160D8372668BF8A03FC45A51CC9
```

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-19 Truncated clone is created.	as expected
AO-20 User notified that clone is truncated.	as expected
AO-22 Tool calculates hashes by block.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis:	Expected results achieved

5.2.18 DA-06-ATA28

Test Case DA-06-ATA28 DCCIDD Version 2.0	
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:	brl
Test Host:	Paladin
Test Date:	Tue Sep 26 14:07:40 2006
Drives:	src(41) dst (7B) other (4D-FU2)
Source Setup:	src hash (SHA256): < FBF3AA21489653D880FFAE71449A9F7E8EE4F56A6C3BF58A3A3FFB13203F1B1D >
	src hash (SHA1): < 15CAA1A307271160D8372668BF8A03FC45A51CC9 >
	src hash (MD5): < 0A6A8EF78BDC14E2026710D8CCB5607C >
	78125000 total sectors (40000000000 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	1 078107967 sectors 39991279104 bytes
Log Highlights:	Hash Window 7812500 bytes, Algorithms: MD5 SHA256
	Block hashes from tool for MD5
	1 3A9A5C8B0F2A7946FC3C16DFBCB90DC3
	2 3F938F0FFF982E369F5FC299222E2A5F
	3 91256F5BA4F0C5CEA90DF23D5A0C8204
	. . .
	5118 D21BEEAC01D1D8ABF549A3D52609DA11
	5119 85BA27B05C255FDEFDB30C48E164972A
	5120 987ED61480BEE01848754A763852F95E
	Reference block hashes from source drive 41
	1 3A9A5C8B0F2A7946FC3C16DFBCB90DC3
	2 3F938F0FFF982E369F5FC299222E2A5F
	3 91256F5BA4F0C5CEA90DF23D5A0C8204
	. . .
	5118 D21BEEAC01D1D8ABF549A3D52609DA11
	5119 85BA27B05C255FDEFDB30C48E164972A
	5120 987ED61480BEE01848754A763852F95E
	Block hashes from tool for SHA256
	1 70CB211D5A579784D1A77B4A017350E788387F850A3274D9A5826B797300D227
	2 3F22388AB1732DB4EAD46E929AE85D235843BF3E5D2FD4322D8C62120A0668F4
	3 1871A45783E1F1C3B0A596A510387B09909ABE0CC72D3BBCF53049C3F5B8D9D0
	. . .
	5118 5BA56973A8A0FE440E2C2E718DA73B81F0FC6EC8A02050D0E144145754B9C3A4
	5119 C7C9B1ED2B5E491979FB9CFD1E976C991D3DA9FC45C03D8515271ECAE2D6486C
	5120 1A0FD5FC32CE152FAF33C0058EA823E9335C6E8A3A0574815534DF17282E3034
	Reference block hashes from source drive 41
	1 70CB211D5A579784D1A77B4A017350E788387F850A3274D9A5826B797300D227

```
Test Case DA-06-ATA28 DCCIDD Version 2.0
        2  3F22388AB1732DB4EAD46E929AE85D235843BF3E5D2FD4322D8C62120A0668F4
        3  1871A45783E1F1C3B0A596A510387B09909ABE0CC72D3BBCF53049C3F5B8D9D0
     . . .
     5118  5BA56973A8A0FE440E2C2E718DA73B81F0FC6EC8A02050D0E144145754B9C3A4
     5119  C7C9B1ED2B5E491979FB9CFD1E976C991D3DA9FC45C03D8515271ECAE2D6486C
     5120  1A0FD5FC32CE152FAF33C0058EA823E9335C6E8A3A0574815534DF17282E3034
    Acquisition hash: 0A6A8EF78BDC14E2026710D8CCB5607C
    FBF3AA21489653D880FFAE71449A9F7E8EE4F56A6C3BF58A3A3FFB13203F1B1D

    Rehash of Source SHA1: 15CAA1A307271160D8372668BF8A03FC45A51CC9
```

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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Results:

Analysis: Expected results achieved

5.2.19 DA-06-ATA48

Test Case DA-06-ATA48 DCCIDD Version 2.0	
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:	brl
Test Host:	AndWife
Test Date:	Mon Oct 2 12:21:01 2006
Drives:	src(4C) dst (56-IDE) other (4D-FU2)
Source Setup:	src hash (SHA1): < 8FF620D2BEDCCAFE8412EDAAD56C8554F872EFBF > src hash (MD5): < D10F763B56D4CEBA2D1311C61F9FB382 > 390721968 total sectors (200049647616 bytes) 24320/254/63 (max cyl/hd values) 24321/255/63 (number of cyl/hd) IDE disk: Model (WDC WD2000JB-00KFA0) serial # (WD-WMAMR1031111) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 390700737 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 390700737 sectors 200038777344 bytes

Log Highlights:	Hash Window 10002482381 bytes, Algorithms: SHA1
	Block hashes from tool for SHA1
	        1 C74202FA18EC7D9A791902F6CFEC405CEFC8CCC3
	        2 41CEE9462A863245AC551BDE6F6AACFB8A4E94EE
	        3 5402D64C3AA6074E73B620FD08809F647E56A83F
	    . . .
	       18 E46983DDFE53B4E16410C5A439F1389260C47732
	       19 02543178AC32D891DC564765C9E1958279743201
	       20 E04838764C97EA88B08C5D15BD6ED072BDBA6625
	Reference block hashes from source drive 4C
	        1 C74202FA18EC7D9A791902F6CFEC405CEFC8CCC3
	        2 41CEE9462A863245AC551BDE6F6AACFB8A4E94EE
	        3 5402D64C3AA6074E73B620FD08809F647E56A83F
	    . . .
	       18 E46983DDFE53B4E16410C5A439F1389260C47732
	       19 02543178AC32D891DC564765C9E1958279743201
	       20 E04838764C97EA88B08C5D15BD6ED072BDBA6625
	Acquisition hash: 8FF620D2BEDCCAFE8412EDAAD56C8554F872EFBF
	
	Rehash of Source SHA1: 8FF620D2BEDCCAFE8412EDAAD56C8554F872EFBF

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

Test Case DA-06-ATA48 DCCIDD Version 2.0		
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.20 DA-06-FW

```
Test Case DA-06-FW DCCIDD Version 2.0
```

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:	brl
Test Host:	Paladin
Test Date:	Tue Oct 3 12:29:43 2006
Drives:	src(63-FU2) dst (2B-FU2) other (4D-FU2)
Source Setup:	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 000000000 0000/000/00 0000/000/00 00 empty entry 5 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 6 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 004192902 sectors 2146765824 bytes 3 113097537 sectors 57905938944 bytes

Log Highlights:	Hash Window 3003007796 bytes, Algorithms: MD5
	Block hashes from tool for MD5
	    1 82F316343BCA4CF7F2DD57C8C9B413D0
	    2 9A6E7F2FD8877A9CDF0A1C843E009ED7
	    3 EBF09928B948A4A6B5983237811CC5CA
	  . . .
	   18 30B88406868520892140C24C9E4E3835
	   19 95084B3F8E2AF5123ABEFB1FB0FD62FB
	   20 AACFC3AF0A4FAAB2B3E5B8A93B4450B0
	Reference block hashes from source drive 63-FU2
	    1 82F316343BCA4CF7F2DD57C8C9B413D0
	    2 9A6E7F2FD8877A9CDF0A1C843E009ED7
	    3 EBF09928B948A4A6B5983237811CC5CA
	  . . .
	   18 30B88406868520892140C24C9E4E3835
	   19 95084B3F8E2AF5123ABEFB1FB0FD62FB
	   20 AACFC3AF0A4FAAB2B3E5B8A93B4450B0
	Acquisition hash: EE217BC4FA4F3D1B4021D29B065AA9EC
	
	Rehash of Source SHA1: 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

Test Case DA-06-FW DCCIDD Version 2.0		
	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.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.21 DA-06-SATA28

Test Case DA-06-SATA28 DCCIDD Version 2.0	
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:	brl
Test Host:	Max
Test Date:	Wed Oct 11 10:29:52 2006
Drives:	src(07) dst (1B) other (4D-FU2)
Source Setup:	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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	1 156280257 sectors 80015491584 bytes
Log Highlights:	Hash Window 4001318093 bytes, Algorithms: SHA1
	Block hashes from tool for SHA1
	1 7EDD59528007535433E9B01165D318B1ACF885F8
	2 81E9A60E806357FE271F63EE7A4A60FCD92380C0
	3 786BDB956D1B6EF728C53D928B71E4C485649780
	. . .
	18 2318005C61D45C568E5E8AA2D332F570A3C0CFD0
	19 1F0208F2FC1CC80A0103174E013F765F8E1A10D0
	20 8EBD6A3C7263D3A07FC637F5582AD16B14F26598
	Reference block hashes from source drive 07
	1 7EDD59528007535433E9B01165D318B1ACF885F8
	2 81E9A60E806357FE271F63EE7A4A60FCD92380C0
	3 786BDB956D1B6EF728C53D928B71E4C485649780
	. . .
	18 2318005C61D45C568E5E8AA2D332F570A3C0CFD0
	19 1F0208F2FC1CC80A0103174E013F765F8E1A10D0
	20 8EBD6A3C7263D3A07FC637F5582AD16B14F26598
	Acquisition hash: 655E9BDDB36A3F9C5C4CC8BF32B8C5B41AF9F52E
	Rehash of Source SHA1: 655E9BDDB36A3F9C5C4CC8BF32B8C5B41AF9F52E
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

Test Case DA-06-SATA28 DCCIDD Version 2.0		
	AO-22 Tool calculates hashes by block.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.22 DA-06-SATA48

Test Case DA-06-SATA48 DCCIDD Version 2.0	
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:	brl
Test Host:	Frank
Test Date:	Thu Dec 14 10:56:09 2006
Drives:	src(16) dst (none) other (4D-FU2)
Source Setup:	src hash (SHA1): < F82982A9C63133988C1D2B4DA7C9C25CCA2D77A5 > src hash (MD5): < 7BB1D64D47671ED3E69130A2AD08FA02 > 312581808 total sectors (160041885696 bytes) 19456/254/63 (max cyl/hd values) 19457/255/63 (number of cyl/hd) Model (WDC WD1600JD-00G) serial # (WD-WMAES2058252) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 312560577 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 312560577 sectors 160031015424 bytes

Log Highlights:	Hash Window 8002094285 bytes, Algorithms: MD5
	Block hashes from tool for MD5
	     1 302DCB1F955D49E2B1D78A00F2744E39
	     2 49D81C86FC905A3320AAE9EF444DA0C7
	     3 83E4B48E8167FF1436ED7A6B24251641
	  . . .
	    18 86088F61BD5F88822511D6E61B7DE2E7
	    19 607A4D8819A1F155F73F15EC860CF971
	    20 C6BB0A2EBA1748BC94388601C58F9967
	Reference block hashes from source drive 16
	     1 302DCB1F955D49E2B1D78A00F2744E39
	     2 49D81C86FC905A3320AAE9EF444DA0C7
	     3 83E4B48E8167FF1436ED7A6B24251641
	  . . .
	    18 86088F61BD5F88822511D6E61B7DE2E7
	    19 607A4D8819A1F155F73F15EC860CF971
	    20 C6BB0A2EBA1748BC94388601C58F9967
	Acquisition hash: 7BB1D64D47671ED3E69130A2AD08FA02
	
	Rehash of Source SHA1: F82982A9C63133988C1D2B4DA7C9C25CCA2D77A5

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

Test Case DA-06-SATA48 DCCIDD Version 2.0		
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.23 DA-06-SCSI

Test Case DA-06-SCSI DCCIDD Version 2.0	
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:	brl
Test Host:	Paladin
Test Date:	Thu Oct 5 09:30:18 2006
Drives:	src(2A) dst (E6) other (4D-FU2)
Source Setup:	src hash (SHA256): < AE8E839101661367D92803D5F5D408268635EFD8A05FEA633838CDC3919F5ABA > src hash (SHA1): < F5F9F2903DCAB895F36E270FB22A722E27918125 > src hash (MD5): < 91E0AC905F682ECF6DE4E9835089B519 > 17783249 total sectors (9105023488 bytes) Model (QM39100TD-SCA) serial # (PCB=20-116711-06 HDAQM39100TD-SCA) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 017751762 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 017751762 sectors 9088902144 bytes

Log Highlights:	Hash Window 910502349 bytes, Algorithms: SHA256
	Block hashes from tool for SHA256
	        1 887EDA0AE0820CB1E21407B5ED64D2175E8DFC118C4DCDD665DE9CC1D78CD627
	        2 E3F7A262F242D3DE8F195D64F6D0674FE138703F5AF4C7CE3F09523858E1D710
	        3 2CD42B6229C18657E34D4A45A3BD6FF499C36300C66E40512245C27F8A385BF3
	      . . .
	        8 7A4A062E603A9702C0BD61763CB89763AF9C8C6FEDC8A496D84A8ADA65FABD1B
	        9 E77EEDF84A2DFEC71123013C0774D1C0CB7D9A1D02444C4C4455065CC03F3240
	       10 19C325326D062A3514E4299FB97415A992B0481404D83B313D64A7B4CFF48F48
	Reference block hashes from source drive 2A
	        1 887EDA0AE0820CB1E21407B5ED64D2175E8DFC118C4DCDD665DE9CC1D78CD627
	        2 E3F7A262F242D3DE8F195D64F6D0674FE138703F5AF4C7CE3F09523858E1D710
	        3 2CD42B6229C18657E34D4A45A3BD6FF499C36300C66E40512245C27F8A385BF3
	      . . .
	        8 7A4A062E603A9702C0BD61763CB89763AF9C8C6FEDC8A496D84A8ADA65FABD1B
	        9 E77EEDF84A2DFEC71123013C0774D1C0CB7D9A1D02444C4C4455065CC03F3240
	       10 19C325326D062A3514E4299FB97415A992B0481404D83B313D64A7B4CFF48F48
	Acquisition hash:
	AE8E839101661367D92803D5F5D408268635EFD8A05FEA633838CDC3919F5ABA
	
	Rehash of Source SHA1: F5F9F2903DCAB895F36E270FB22A722E27918125

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

Test Case DA-06-SCSI DCCIDD Version 2.0		
	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.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.24   DA-06-USB

Test Case DA-06-USB DCCIDD Version 2.0	
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:	brl
Test Host:	Paladin
Test Date:	Mon Oct 2 09:55:44 2006
Drives:	src(24-FU2) dst (33-FU2) other (4D-FU2)
Source Setup:	src hash (SHA1): < A78EDB5E90298D0CDF199B4B62119F81208A252A >
	src hash (MD5): < 90311DDF672B8CBA0869A46F4A455A7E >
	39070080 total sectors (20003880960 bytes)
	19076/063/32 (max cyl/hd values)
	19077/064/32 (number of cyl/hd)
	Model (ATCS04-0) serial # (CSH206D9DSEL)
Log Highlights:	Hash Window 2000388096 bytes, Algorithms: MD5
	Block hashes from tool for MD5
	1 9FA708CFF959957118332A4138DA11AC
	2 4392FA47D09ED9BE561E30F6E3CCC03D
	3 CA396B233D5C272E8ACFE4F15988FCF7
	. . .
	8 C1D21372B22183F7F70D5D39F69FA34B
	9 BE95A173D9283D8609659805C509916F
	10 AC09CD51E6C6671D5D31EB9CF96B8C71
	Reference block hashes from source drive 24-FU2
	1 9FA708CFF959957118332A4138DA11AC
	2 4392FA47D09ED9BE561E30F6E3CCC03D
	3 CA396B233D5C272E8ACFE4F15988FCF7
	. . .
	8 C1D21372B22183F7F70D5D39F69FA34B
	9 BE95A173D9283D8609659805C509916F
	10 AC09CD51E6C6671D5D31EB9CF96B8C71
	Acquisition hash: 90311DDF672B8CBA0869A46F4A455A7E
	Rehash of Source SHA1: A78EDB5E90298D0CDF199B4B62119F81208A252A

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.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected

Test Case DA-06-USB DCCIDD Version 2.0	
Analysis:	Expected results achieved

5.2.25   DA-07-CF

Test Case DA-07-CF DCCIDD Version 2.0	
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:	brl
Test Host:	Paladin
Test Date:	Thu Oct 19 14:41:12 2006
Drives:	src(C1-CF) dst (02) other (none)
Source Setup:	src hash (SHA256): < C7CF0218222DF80D5316511D6814266C7FA507C13F795AD3D323BB73C1590D80 > src hash (SHA1): < 5B8235178DF99FA307430C088F81746606638A0B > src hash (MD5): < 776DF8B4D2589E21DEBCF589EDC16D78 > 503808 total sectors (257949696 bytes) Model (CF) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other 2 P 168689522 1936028240 0288/115/43 0367/114/50 Boot 65 other 3 P 1869881465 1936028192 0366/032/33 0357/032/43 Boot 79 other 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 Highlights:	Hash Window 100000 bytes, Algorithms: MD5 SHA1 SHA256
	Block hashes from tool for MD5
	     1 490F4B60B33916055444EBAF64DA8E60
	     2 0019D23BEF56A136A1891211D7007F6F
	     3 0019D23BEF56A136A1891211D7007F6F
	   . . .
	  2578 2E464114B17CF569550435739BEEF414
	  2579 4B47A08BE29F0ED2BBFD8026A754B610
	  2580 19B612C14A0BC56AE1104945C5BB7C8C
	Reference block hashes from source drive C1-CF
	     1 490F4B60B33916055444EBAF64DA8E60
	     2 0019D23BEF56A136A1891211D7007F6F
	     3 0019D23BEF56A136A1891211D7007F6F
	   . . .
	  2578 2E464114B17CF569550435739BEEF414
	  2579 4B47A08BE29F0ED2BBFD8026A754B610
	  2580 19B612C14A0BC56AE1104945C5BB7C8C
	Block hashes from tool for SHA1
	     1 68312F61C4A4D7DDF257ABDFABD3C8A7BD77DFA8
	     2 B98C6A155DC7A778874DFC6023BE2BACC2E495DD
	     3 B98C6A155DC7A778874DFC6023BE2BACC2E495DD
	   . . .
	  2578 AF3CF8BE8EDC8CE2348D592229FB673A5418D6D1
	  2579 666824903349F3C0FDE8E9C2FF685251D746E485
	  2580 1B28FC17E127B15EE0001A2C3C69AA4ACFA79888
	Reference block hashes from source drive C1-CF

```
Test Case DA-07-CF DCCIDD Version 2.0
          1  68312F61C4A4D7DDF257ABDFABD3C8A7BD77DFA8
          2  B98C6A155DC7A778874DFC6023BE2BACC2E495DD
          3  B98C6A155DC7A778874DFC6023BE2BACC2E495DD

       2578  AF3CF8BE8EDC8CE2348D592229FB673A5418D6D1
       2579  666824903349F3C0FDE8E9C2FF685251D746E485
       2580  1B28FC17E127B15EE0001A2C3C69AA4ACFA79888
     Block hashes from tool for SHA256
          1  20B7E84CA5E32976BB0280A2086491AA4E3BA05E117689D2214DA348D79F74E1
          2  9192C25B734FCBADBE32DADC28089C60DB0E39F90CC20CE2E5733F57261ACC0C
          3  9192C25B734FCBADBE32DADC28089C60DB0E39F90CC20CE2E5733F57261ACC0C

       2578  344B0AC1DB9CE02595788285167F13B4BD8C51F25BE6DD4F9555FCF968281F8D
       2579  70204081121A50B01F2D5A13369B135ECDE5565D8F30194601EAA80B3295F45C
       2580  CF681B791731C7074C55BAFDAB761D05395F581D39FC5EB24634DA126450B0C0
     Reference block hashes from source drive C1-CF
          1  20B7E84CA5E32976BB0280A2086491AA4E3BA05E117689D2214DA348D79F74E1
          2  9192C25B734FCBADBE32DADC28089C60DB0E39F90CC20CE2E5733F57261ACC0C
          3  9192C25B734FCBADBE32DADC28089C60DB0E39F90CC20CE2E5733F57261ACC0C

       2578  344B0AC1DB9CE02595788285167F13B4BD8C51F25BE6DD4F9555FCF968281F8D
       2579  70204081121A50B01F2D5A13369B135ECDE5565D8F30194601EAA80B3295F45C
       2580  CF681B791731C7074C55BAFDAB761D05395F581D39FC5EB24634DA126450B0C0
     Acquisition hash: 776DF8B4D2589E21DEBCF589EDC16D78
     5B8235178DF99FA307430C088F81746606638A0B
     C7CF0218222DF80D5316511D6814266C7FA507C13F795AD3D323BB73C1590D80

     Rehash of Source SHA1: 5B8235178DF99FA307430C088F81746606638A0B
```

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.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.26   DA-07-F12

Test Case DA-07-F12 DCCIDD Version 2.0	
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:	brl
Test Host:	Frank
Test Date:	Wed Oct 18 14:57:02 2006
Drives:	src(43) dst (4D-FU2) other (none)

Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 >
	src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 >
	78125000 total sectors (40000000000 bytes)
	Model (0BB-75JHC0) serial # (WD-WMAMC46588)
	<pre>N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X
	 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended
	 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12
	 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended
	 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16
	 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended
	 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other
	 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended
	 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32
	10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended
	11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux
	12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended
	13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	18 P 000000000 000000000 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</pre>Partition Hashes
	43F12 md5sum 16418303 CBA0C9984F51778E89DEF0C6BED06864
	43F12 sha1sum 16418303 6853B517F50BF3CCADED3DB5FEAE08C18C62FCA0
	43F12 sha256sum 16418303
	70AF38479F8384CD7457AA6CE0C255B3C6AFB1FA65F9C2C2DD285F38EE4AD8E2

Log Highlights:	Hash Window 512 bytes, Algorithms: MD5 SHA1 SHA256
	Block hashes from tool for MD5
	      1 4C42CFDF8692C879182616AE8D65C735
	      2 F018E29C0F7EB9482D513E2E4C4396BB

```
         3  F018E29C0F7EB9482D513E2E4C4396BB
    . . .
  32065  EA81BAAA271A63DD654A61440C030B39
  32066  FF4E17CB6509C5645DCB62480D262839
  32067  0A50B6227BED950D769D860A082922F4
Reference block hashes from source drive 43
         1  4C42CFDF8692C879182616AE8D65C735
         2  F018E29C0F7EB9482D513E2E4C4396BB
         3  F018E29C0F7EB9482D513E2E4C4396BB
    . . .
  32065  EA81BAAA271A63DD654A61440C030B39
  32066  FF4E17CB6509C5645DCB62480D262839
  32067  0A50B6227BED950D769D860A082922F4
Block hashes from tool for SHA1
         1  D8EDA931D6B87C1E970BE64F5A251CA80FD308FB
         2  92BB4CF0F8BDB935052E80D4BECE2AF368D2D141
         3  92BB4CF0F8BDB935052E80D4BECE2AF368D2D141
    . . .
  32065  D9038E86EF7C94F658876559B30632CABBAD2066
  32066  72F93F925E4254F73D063AF3028D079727113001
  32067  D5D647F735C9564E62C29FBC32FC599683BA91AE
Reference block hashes from source drive 43
         1  D8EDA931D6B87C1E970BE64F5A251CA80FD308FB
         2  92BB4CF0F8BDB935052E80D4BECE2AF368D2D141
         3  92BB4CF0F8BDB935052E80D4BECE2AF368D2D141
    . . .
  32065  D9038E86EF7C94F658876559B30632CABBAD2066
  32066  72F93F925E4254F73D063AF3028D079727113001
  32067  D5D647F735C9564E62C29FBC32FC599683BA91AE
Block hashes from tool for SHA256
         1  88672C380D0791A7862B54344005CCCD42D30EDEACDE0B8B497723D4ADE1A0FF
         2  B140168E270A194660D4ECB93BBD23892CFA96A2CCD38CFB9959FD0F0DA91DB6
         3  B140168E270A194660D4ECB93BBD23892CFA96A2CCD38CFB9959FD0F0DA91DB6
    . . .
  32065  CD9BF17D23E981ED32051ACF175ED68E3B468923171354820F6CC82362EB8535
  32066  BB42C6EDA0EC74D953F92F5810F7C808D9326ED413C7EEE31F4C8D2E0F048D6F
  32067  8DFF0345E6576D8931401E96E2492480E3FE05AEC98FCD93ACFBA060C90821A7
Reference block hashes from source drive 43
         1  88672C380D0791A7862B54344005CCCD42D30EDEACDE0B8B497723D4ADE1A0FF
         2  B140168E270A194660D4ECB93BBD23892CFA96A2CCD38CFB9959FD0F0DA91DB6
         3  B140168E270A194660D4ECB93BBD23892CFA96A2CCD38CFB9959FD0F0DA91DB6
    . . .
  32065  CD9BF17D23E981ED32051ACF175ED68E3B468923171354820F6CC82362EB8535
  32066  BB42C6EDA0EC74D953F92F5810F7C808D9326ED413C7EEE31F4C8D2E0F048D6F
  32067  8DFF0345E6576D8931401E96E2492480E3FE05AEC98FCD93ACFBA060C90821A7
Acquisition hash: CBA0C9984F51778E89DEF0C6BED06864
6853B517F50BF3CCADED3DB5FEAE08C18C62FCA0
70AF38479F8384CD7457AA6CE0C255B3C6AFB1FA65F9C2C2DD285F38EE4AD8E2

Rehash of Source SHA1: 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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis: Expected results achieved

5.2.27   DA-07-F16

Test Case DA-07-F16 DCCIDD Version 2.0	
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:	brl
Test Host:	Frank
Test Date:	Thu Oct 19 10:53:33 2006
Drives:	src(43) dst (4D-FU2) other (none)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43F16 md5sum 1077479423 37E81FFB31C3CB38AA48B2237500908E 43F16 sha1sum 1077479423 443CCEC9A22F726DAF6CE384817151C83B3EBC8B 43F16 sha256sum 1077479423 EFEF3731BCFBB1F7B279FA813FE47CA8DD90E24D8BF89D4CE7BA6D1C93E5CA51

Log Highlights:	Hash Window 10000000 bytes, Algorithms: MD5 SHA1 SHA256
	Block hashes from tool for MD5
	     1 AB7656692E38931509952710C6619E11
	     2 950EF9D0E139A5A36ED0B9A65DF3BFF3
	     3 C026D4D027A1C09B9DDACDEA77861113

```
Test Case DA-07-F16 DCCIDD Version 2.0
         . . .
         106  1E742D99C8F24901D64D0BAC8E3AF5BC
         107  D78CACA6D61F0FBE37C36A09E9F978E5
         108  B9116B0955123D4FC7ADAD33E729D798
     Reference block hashes from source drive 43
           1  AB7656692E38931509952710C6619E11
           2  950EF9D0E139A5A36ED0B9A65DF3BFF3
           3  C026D4D027A1C09B9DDACDEA77861113
         . . .
         106  1E742D99C8F24901D64D0BAC8E3AF5BC
         107  D78CACA6D61F0FBE37C36A09E9F978E5
         108  B9116B0955123D4FC7ADAD33E729D798
     Block hashes from tool for SHA1
           1  8D09B04E0F9EC9B263379206F42CF3870BDB2BB2
           2  E5530225372B9A128FC44E12081295653B2D146D
           3  37E69A28DB2583C5B5E1C7D485DD875EDB03BA7D
         . . .
         106  832B1316FA221E7BDC7B07FCAFE288015B3449CD
         107  BE185B4144D9D69164FC2805959E67C7E98E719F
         108  94A2CC31FAC5A3EB8CFB3014BA3C4D5A26EC611F
     Reference block hashes from source drive 43
           1  8D09B04E0F9EC9B263379206F42CF3870BDB2BB2
           2  E5530225372B9A128FC44E12081295653B2D146D
           3  37E69A28DB2583C5B5E1C7D485DD875EDB03BA7D
         . . .
         106  832B1316FA221E7BDC7B07FCAFE288015B3449CD
         107  BE185B4144D9D69164FC2805959E67C7E98E719F
         108  94A2CC31FAC5A3EB8CFB3014BA3C4D5A26EC611F
     Block hashes from tool for SHA256
           1  C70AF14F4246C12F07BB0836BFD0D5F2D18C17336C276D7F85DFF706690FDC0B
           2  0285F822FAECA3B1CEBB29371327380F8AEA43D3F225CE518D8016A366A1D2D0
           3  C8B116FFF5E614409B7B9B2D499505D75FEA46ADF589CFF5C18668E54DC8FF1C
         . . .
         106  4F6DCDC4122C6F35DC94F7889D4758606F76DFBE7A5BE0B256C7EB0CEA30894A
         107  98743E7451183DDD86FED38D93D534EAC6E18F78A02D830913E1315E2C41D109
         108  FBA2F8C44A4F8E1AEFCA51CCDC8B9B74178E18FBC006CFBA20DAD97A153B3529
     Reference block hashes from source drive 43
           1  C70AF14F4246C12F07BB0836BFD0D5F2D18C17336C276D7F85DFF706690FDC0B
           2  0285F822FAECA3B1CEBB29371327380F8AEA43D3F225CE518D8016A366A1D2D0
           3  C8B116FFF5E614409B7B9B2D499505D75FEA46ADF589CFF5C18668E54DC8FF1C
         . . .
         106  4F6DCDC4122C6F35DC94F7889D4758606F76DFBE7A5BE0B256C7EB0CEA30894A
         107  98743E7451183DDD86FED38D93D534EAC6E18F78A02D830913E1315E2C41D109
         108  FBA2F8C44A4F8E1AEFCA51CCDC8B9B74178E18FBC006CFBA20DAD97A153B3529
     Acquisition hash: 37E81FFB31C3CB38AA48B2237500908E
     443CCEC9A22F726DAF6CE384817151C83B3EBC8B
     EFEF3731BCFBB1F7B279FA813FE47CA8DD90E24D8BF89D4CE7BA6D1C93E5CA51

     Rehash of Source SHA1: 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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis: Expected results achieved

5.2.28 DA-07-F32

Test Case DA-07-F32 DCCIDD Version 2.0	
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:	brl
Test Host:	Frank
Test Date:	Thu Oct 19 14:20:02 2006
Drives:	src(43) dst (4D-FU2) other (none)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) <pre> N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43F32 md5sum 4301789183 2C4D8D450E5AD28329F616D87114CCFE 43F32 sha1sum 4301789183 72462489BCF79A98B59B6A8CD938FEB46FA2A781</pre>

Log Highlights:	Hash Window 430178919 bytes, Algorithms: MD5
	Block hashes from tool for MD5
	<pre> 1 6799A7A403AAC0B756BD83B11CE4C642
	      2 33301322C11AA623A164D84519C5F5D9
	      3 F79ADA4DE92DB7157C3D2622A56D95C5</pre>

```
Test Case DA-07-F32 DCCIDD Version 2.0
            . . .
            8  4ED205EC5A29C36455E76B2BBAA5766F
            9  61EA91577B8D062128177F7C551BF07C
           10  B18B8DC672460439219A34500F24C77D
        Reference block hashes from source drive 43
            1  6799A7A403AAC0B756BD83B11CE4C642
            2  33301322C11AA623A164D84519C5F5D9
            3  F79ADA4DE92DB7157C3D2622A56D95C5
            . . .
            8  4ED205EC5A29C36455E76B2BBAA5766F
            9  61EA91577B8D062128177F7C551BF07C
           10  B18B8DC672460439219A34500F24C77D
        Acquisition hash: 2C4D8D450E5AD28329F616D87114CCFE

        Rehash of Source SHA1: 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.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected

Analysis:	Expected results achieved

5.2.29   DA-07-F32X

Test Case DA-07-F32X DCCIDD Version 2.0	
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:	brl
Test Host:	Frank
Test Date:	Thu Oct 19 16:52:36 2006
Drives:	src(43) dst (4D-FU2) other (none)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 >
	src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 >
	78125000 total sectors (40000000000 bytes)
	Model (0BB-75JHC0) serial # (WD-WMAMC46588)
	N Start LBA Length Start C/H/S End C/H/S boot Partition type
	1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X
	2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended
	3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12
	4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended
	5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16
	6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended
	7 S 000000063 004192902 1023/001/01 1023/254/63 16 other
	8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended
	9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32
	10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended
	11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux
	12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended
	13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	18 P 000000000 000000000 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
	Partition Hashes
	43F32x sha1sum 10742183423 379C1AC47AF956FC8C80389C2A7427A7F8FB4E89
Log Highlights:	Hash Window 1074218343 bytes, Algorithms: SHA1
	Block hashes from tool for SHA1
	1 EB76865D7A006E0D73690F1BB2C35E19785CED41
	2 288CB346D8C36A784CC646F1D68F3C5BB3BB6E90
	3 8DF7991A42629D7A9B46E88443B7A36EC0533317
	. . .
	8 22BCB502EF527C91BA671E6A74F8534086CF8F85

```
Test Case DA-07-F32X DCCIDD Version 2.0
         9  36EEB724AFAB46E73CEA91A346E5544CC175BBE2
        10  2BCFDFDA014018E8C916A662924AAF800D41774F
Reference block hashes from source drive 43
         1  EB76865D7A006E0D73690F1BB2C35E19785CED41
         2  288CB346D8C36A784CC646F1D68F3C5BB3BB6E90
         3  8DF7991A42629D7A9B46E88443B7A36EC0533317
      . . .
         8  22BCB502EF527C91BA671E6A74F8534086CF8F85
         9  36EEB724AFAB46E73CEA91A346E5544CC175BBE2
        10  2BCFDFDA014018E8C916A662924AAF800D41774F
Acquisition hash: 379C1AC47AF956FC8C80389C2A7427A7F8FB4E89

Rehash of Source SHA1: 888E2E7F7AD237DC7A732281DD93F325065E5871
```

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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Results: (see table above)

Analysis: Expected results achieved

5.2.30   DA-07-NT

Test Case DA-07-NT DCCIDD Version 2.0	
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:	brl
Test Host:	Frank
Test Date:	Fri Oct 20 09:06:07 2006
Drives:	src(43) dst (4D-FU2) other (none)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) <pre> N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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</pre> Partition Hashes 43NT sha256sum 14188575743 F55B0901A6C4AE1B726C36DCB1C1E534B65975B6D5B028FC3B5547FAF7B3A244

Log Highlights:	Hash Window 1418857575 bytes, Algorithms: SHA256
	Block hashes from tool for SHA256
	<pre> 1 003925748AEC7ED3906D5753AA32E7540DCF3AA9C29C02F299E1A4C08DCFED70
	      2 47566F00F0357409D5908D095D542290F953F612F23234D340F34D748D3767F5
	      3 68A93D86B9651485C0E1AB681E7B2EA43CDF7B301C1E37D875D60505B0131A3B
	   . . . .</pre>

```
Test Case DA-07-NT DCCIDD Version 2.0
            8  0D27501C09C4C1FD14A54B437D1A43578C09D4C5462EF2456A392F9F47E0BD4F
            9  1C53280822AF1FD59DACB5FCE53F7947DC5C7AD30BCB684FD54F3B1C6CFDD23B
           10  91F8098AC539BEB53DF00A3CF819A484909208AD2419AEFA4EF4AC2A56104AE1
       Reference block hashes from source drive 43
            1  003925748AEC7ED3906D5753AA32E7540DCF3AA9C29C02F299E1A4C08DCFED70
            2  47566F00F0357409D5908D095D542290F953F612F23234D340F34D748D3767F5
            3  68A93D86B9651485C0E1AB681E7B2EA43CDF7B301C1E37D875D60505B0131A3B
         . . .
            8  0D27501C09C4C1FD14A54B437D1A43578C09D4C5462EF2456A392F9F47E0BD4F
            9  1C53280822AF1FD59DACB5FCE53F7947DC5C7AD30BCB684FD54F3B1C6CFDD23B
           10  91F8098AC539BEB53DF00A3CF819A484909208AD2419AEFA4EF4AC2A56104AE1
       Acquisition hash:
       F55B0901A6C4AE1B726C36DCB1C1E534B65975B6D5B028FC3B5547FAF7B3A244

       Rehash of Source SHA1: 888E2E7F7AD237DC7A732281DD93F325065E5871
```

	Assertion & Expected Result	Actual Result
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.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected

Analysis:	Expected results achieved

5.2.31 DA-07-SWAP

```
Test Case DA-07-SWAP DCCIDD Version 2.0
```

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:	brl
Test Host:	Frank
Test Date:	Fri Oct 20 15:23:48 2006
Drives:	src(43) dst (4D-FU2) other (none)

Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 >
	src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 >
	78125000 total sectors (40000000000 bytes)
	Model (0BB-75JHC0) serial # (WD-WMAMC46588)
	
	` N    Start LBA Length     Start C/H/S End C/H/S   boot Partition type`
	` 1 P 000000063 020980827 0000/001/01 1023/254/63      0C Fat32X`
	` 2 X 020980890 057143205 1023/000/01 1023/254/63      0F extended`
	` 3 S 000000063 000032067 1023/001/01 1023/254/63      01 Fat12`
	` 4 x 000032130 002104515 1023/000/01 1023/254/63      05 extended`
	` 5 S 000000063 002104452 1023/001/01 1023/254/63      06 Fat16`
	` 6 x 002136645 004192965 1023/000/01 1023/254/63      05 extended`
	` 7 S 000000063 004192902 1023/001/01 1023/254/63      16 other`
	` 8 x 006329610 008401995 1023/000/01 1023/254/63      05 extended`
	` 9 S 000000063 008401932 1023/001/01 1023/254/63      0B Fat32`
	`10 x 014731605 010490445 1023/000/01 1023/254/63      05 extended`
	`11 S 000000063 010490382 1023/001/01 1023/254/63      83 Linux`
	`12 x 025222050 004209030 1023/000/01 1023/254/63      05 extended`
	`13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00      00 empty entry`
	`17 P 000000000 000000000 0000/000/00 0000/000/00      00 empty entry`
	`18 P 000000000 000000000 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`
	
	Partition Hashes
	43swap md5sum 2154991103 4B602964A30FE20D1B22B046A7375A7C
	43swap sha1sum 2154991103 F5B062CC31DA088DF7FAF8F7A47E500BF4244BCF

Log Highlights:	Hash Window 215499111 bytes, Algorithms: MD5 SHA1
	Block hashes from tool for MD5
	    1 F642CA429C3BBDF67960BAECF3E925B2
	    2 2E906761FB00C5A49723A25B497B10B6
	    3 406E76A8111E6236675733BC501F154E
	 . . . .

```
Test Case DA-07-SWAP DCCIDD Version 2.0
        8  1A90D19475EE5484E345876883665BFE
        9  7BDE3BC25C21379225D7CBAE820A92B1
       10  63AEDBB8903F6A8EAC75791980D4B575
Reference block hashes from source drive 43
        1  F642CA429C3BBDF67960BAECF3E925B2
        2  2E906761FB00C5A49723A25B497B10B6
        3  406E76A8111E6236675733BC501F154E
     . . .
        8  1A90D19475EE5484E345876883665BFE
        9  7BDE3BC25C21379225D7CBAE820A92B1
       10  63AEDBB8903F6A8EAC75791980D4B575
Block hashes from tool for SHA1
        1  2C1CB487A2EF7A8820C02CE81C20AAD5697EE837
        2  AA57F611BB7CC759423C6DBBABC7AACCCFFD086A
        3  1CD836A992E2576E719E66B53DEE42C93AB40F11
     . . .
        8  A23EE0472976722D27F34730111334992D0B49A0
        9  F1E1811AB1215618DB5CC6C8EE4E669C5495AFE8
       10  6BAD320AC9E7DE6920E20AFCF0679A618803D8A6
Reference block hashes from source drive 43
        1  2C1CB487A2EF7A8820C02CE81C20AAD5697EE837
        2  AA57F611BB7CC759423C6DBBABC7AACCCFFD086A
        3  1CD836A992E2576E719E66B53DEE42C93AB40F11
     . . .
        8  A23EE0472976722D27F34730111334992D0B49A0
        9  F1E1811AB1215618DB5CC6C8EE4E669C5495AFE8
       10  6BAD320AC9E7DE6920E20AFCF0679A618803D8A6
Acquisition hash: 4B602964A30FE20D1B22B046A7375A7C
F5B062CC31DA088DF7FAF8F7A47E500BF4244BCF

Rehash of Source SHA1: 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.	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-07-THUMB

Test Case DA-07-THUMB DCCIDD Version 2.0	
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:	brl
Test Host:	Paladin
Test Date:	Thu Oct 19 15:53:55 2006
Drives:	src(D2-THUMB) dst (02) other (none)
Source Setup:	src hash (SHA256): < ECA93D932C8069B03C36E5AD99A163688C2A6313421D843F46E675567777E8C7 > src hash (SHA1): < 712C9F59F598745977E4E19F235F83CE8F4EC7BA > src hash (MD5): < EA06F74BE51D0730B3F7079D7A3D5AE8 > 253400 total sectors (129740800 bytes) Model (TS128MJFLASHA) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other 2 P 168689522 1936028240 0288/115/43 0367/114/50 Boot 65 other 3 P 1869881465 1936028192 0366/032/33 0357/032/43 Boot 79 other 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 Highlights:	Hash Window 8000 bytes, Algorithms: MD5 SHA1 SHA256
	Block hashes from tool for MD5
	      1 CDE69E2068262BE4B7B9983898E4B60D
	      2 58101249C76B735BD74CE5302B009317
	      3 94F8BC2494D2E3D97254D61F99078A3B
	   . . .
	 16216 7989E05E83AACD90A091AAC2ACA4F8A4
	 16217 200C4EAF7206028F6C68EC24CDAB5CAD
	 16218 B137B7AE1D9D7AD454C762FF9943CB2E
	Reference block hashes from source drive D2-THUMB
	      1 CDE69E2068262BE4B7B9983898E4B60D
	      2 58101249C76B735BD74CE5302B009317
	      3 94F8BC2494D2E3D97254D61F99078A3B
	   . . .
	 16216 7989E05E83AACD90A091AAC2ACA4F8A4
	 16217 200C4EAF7206028F6C68EC24CDAB5CAD
	 16218 B137B7AE1D9D7AD454C762FF9943CB2E
	Block hashes from tool for SHA1
	      1 7ECA8513C1D1337AEE679E8DC192375F7E1F637A
	      2 75A289EEC0A33499FBAA6E89081C0EFA604FBDD4
	      3 D0F795061DF308677BDDFEAA91360C9BA6B4F066
	   . . .
	 16216 85CDEAB1F5793FCFD1F0F9F1534D885824F5D632
	 16217 736F9F375C9F5F1E3207654F7A650D8F7E491807
	 16218 DB62FA536CA59A7270CDF4B45D3097FA6CFEB8C9
	Reference block hashes from source drive D2-THUMB

```
Test Case DA-07-THUMB DCCIDD Version 2.0
              1  7ECA8513C1D1337AEE679E8DC192375F7E1F637A
              2  75A289EEC0A33499FBAA6E89081C0EFA604FBDD4
              3  D0F795061DF308677BDDFEAA91360C9BA6B4F066

         . . .
         16216  85CDEAB1F5793FCFD1F0F9F1534D885824F5D632
         16217  736F9F375C9F5F1E3207654F7A650D8F7E491807
         16218  DB62FA536CA59A7270CDF4B45D3097FA6CFEB8C9
    Block hashes from tool for SHA256
              1  821D48E67962FD78815531E60BB88F4E1743BC9A081CE11DC4407B74F280ECE2
              2  668946BAB9868B28489BB906205EE1026045C8BCD3CA62A1BDF733C65491351B
              3  CA27BD348D35BA6ECFEBC2F49227AFD0CF77D54BE0B26BB038B1526A6CA36869

         . . .
         16216  D3FD0FCBBA79B7DCF5C364ADE447B6481ABBA6908E23340E1433B841D3EE7277
         16217  60C157A734C4C46335DE3455BF25D7567A0FB34E1F47BCF9A290F440545C2475
         16218  629A2FEAAD92D79EB882F203D57C8B342C139905854F6B46FACED9315265636A
    Reference block hashes from source drive D2-THUMB
              1  821D48E67962FD78815531E60BB88F4E1743BC9A081CE11DC4407B74F280ECE2
              2  668946BAB9868B28489BB906205EE1026045C8BCD3CA62A1BDF733C65491351B
              3  CA27BD348D35BA6ECFEBC2F49227AFD0CF77D54BE0B26BB038B1526A6CA36869

         . . .
         16216  D3FD0FCBBA79B7DCF5C364ADE447B6481ABBA6908E23340E1433B841D3EE7277
         16217  60C157A734C4C46335DE3455BF25D7567A0FB34E1F47BCF9A290F440545C2475
         16218  629A2FEAAD92D79EB882F203D57C8B342C139905854F6B46FACED9315265636A
    Acquisition hash: EA06F74BE51D0730B3F7079D7A3D5AE8
    712C9F59F598745977E4E19F235F83CE8F4EC7BA
    ECA93D932C8069B03C36E5AD99A163688C2A6313421D843F46E675567777E8C7

    Rehash of Source SHA1: 712C9F59F598745977E4E19F235F83CE8F4EC7BA
```

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.	as expected
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected

Analysis:	Expected results achieved

5.2.33   DA-07-X2

Test Case DA-07-X2 DCCIDD Version 2.0	
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:	brl
Test Host:	Frank
Test Date:	Tue Oct 17 15:18:50 2006
Drives:	src(43) dst (4D-FU2) other (none)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43x2 md5sum 5371075583 C7A84DE9ACBCB05463604CE8823D0874 43x2 sha256sum 5371075583 61F0030EDB667BA43A26A24A9A25281817537D2261D687F7EDCB32B5E60E39E7

Log Highlights:	Hash Window 537107559 bytes, Algorithms: MD5 SHA256
	Block hashes from tool for MD5
	      1 E6839D26EA376FBD35AE7363937A3EF1
	      2 3C0D17730CCC2EE72A4144FAC965464C
	      3 58EEA095F179FA10F3EE84A1934CDA64

```
        . . .
        8  CE84A89306B5B6CA3401C9614DA13A99
        9  007105B7B00C27D087F1A9CA1A732439
       10  FFFA343773E3426255D748054C55E87B
Reference block hashes from source drive 43
        1  E6839D26EA376FBD35AE7363937A3EF1
        2  3C0D17730CCC2EE72A4144FAC965464C
        3  58EEA095F179FA10F3EE84A1934CDA64
        . . .
        8  CE84A89306B5B6CA3401C9614DA13A99
        9  007105B7B00C27D087F1A9CA1A732439
       10  FFFA343773E3426255D748054C55E87B
Block hashes from tool for SHA256
        1  E456BD80B628E80BD1FDFB9B6F0935AB2DC28238E39E0C5F36F1EBF9ECE1FD44
        2  05E217D42B6A00CB157B60644950C33630CF0B3160A2D9AA76E77DB8CD5B37B6
        3  9D0C693F7EA3A351A815F3D484232E9832ABF36016D8CD680D6270457300F168
        . . .
        8  F2EE9EB8EC51B749D96582065D763DEF151497588FBCFBD218C15771F1A38293
        9  57ED0901C294FDDE7D04FC06B2EC123463C3D0B744E40B469147610358AF1974
       10  754B6D9E3D71058B3739E4BEF73B39541222218B3C6D60C713C2E60917CFE24F
Reference block hashes from source drive 43
        1  E456BD80B628E80BD1FDFB9B6F0935AB2DC28238E39E0C5F36F1EBF9ECE1FD44
        2  05E217D42B6A00CB157B60644950C33630CF0B3160A2D9AA76E77DB8CD5B37B6
        3  9D0C693F7EA3A351A815F3D484232E9832ABF36016D8CD680D6270457300F168
        . . .
        8  F2EE9EB8EC51B749D96582065D763DEF151497588FBCFBD218C15771F1A38293
        9  57ED0901C294FDDE7D04FC06B2EC123463C3D0B744E40B469147610358AF1974
       10  754B6D9E3D71058B3739E4BEF73B39541222218B3C6D60C713C2E60917CFE24F
Acquisition hash: C7A84DE9ACBCB05463604CE8823D0874
61F0030EDB667BA43A26A24A9A25281817537D2261D687F7EDCB32B5E60E39E7

Rehash of Source SHA1: 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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis: Expected results achieved

5.2.34   DA-08-ATA28

Test Case DA-08-ATA28 DCCIDD Version 2.0	
Case Summary:	DA-08 Acquire a physical drive with hidden sectors 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-07 All hidden 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:	brl
Test Host:	Max
Test Date:	Thu Oct 12 09:36:25 2006
Drives:	src(42) dst (4D-FU2) other (none)
Source Setup:	src hash (SHA1): < 5A75399023056E0EB905082B35F8FAA1DB049229 > src hash (MD5): < F4B9AAB24554EEEB2A962BDA554A9252 > 78165360 total sectors (40020664320 bytes) 65534/015/63 (max cyl/hd values) 65535/016/63 (number of cyl/hd) IDE disk: Model (WDC WD400JB-00JJC0) serial # (WD-WCAMA3958512) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 070348572 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 070348572 sectors 36018468864 bytes HPA created BIOS, XBIOS and Direct disk geometry Reporter (BXDR) BXDR 128 /S70000000 /P /fbxdrlog.txt Setting Maximum Addressable Sector to 70000000 MAS now set to 70000000 Hashes with HPA in place md5:9BF3C3DEADE47056A1DDC073C5F6B2E2 sha1:D76F909482B00767B62C295CADE202F92E61CD2E
Log Highlights:	Acquisition hash: F4B9AAB24554EEEB2A962BDA554A9252 5A75399023056E0EB905082B35F8FAA1DB049229 Rehash of Source SHA1: 5A75399023056E0EB905082B35F8FAA1DB049229
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-07 All hidden 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.	as expected

Test Case DA-08-ATA28 DCCIDD Version 2.0		
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.35   DA-08-ATA48

Test Case DA-08-ATA48 DCCIDD Version 2.0	
Case Summary:	DA-08 Acquire a physical drive with hidden sectors 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-07 All hidden 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:	brl
Test Host:	AndWife
Test Date:	Mon Oct 9 11:18:00 2006
Drives:	src(4B) dst (02) other (none)
Source Setup:	src hash (SHA1): < F409920836FED76DBB60DEEEF467A6DDED5BF48E > src hash (MD5): < B5641B5A594912B4D60518304B1DE698 > 390721968 total sectors (200049647616 bytes) 24320/254/63 (max cyl/hd values) 24321/255/63 (number of cyl/hd) IDE disk: Model (WDC WD2000JB-00GVC0) serial # (WD-WCAL78252964) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 351646722 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 351646722 sectors 180043121664 bytes HPA created BIOS, XBIOS and Direct disk geometry Reporter (BXDR) BXDR 128 /S351000000 /P /fHPA.TXT Setting Maximum Addressable Sector to 351000000 MAS now set to 351000000 Hashes with HPA in place md5:6BAFEFC000470C126434D933429C879B sha1:2D50DBD82CD3DA90A6E5BF13B2B40808C40998A1
Log Highlights:	Acquisition hash: B5641B5A594912B4D60518304B1DE698 F409920836FED76DBB60DEEEF467A6DDED5BF48E Rehash of Source SHA1: F409920836FED76DBB60DEEEF467A6DDED5BF48E
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-07 All hidden 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.	as expected

Test Case DA-08-ATA48 DCCIDD Version 2.0		
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.36　　DA-08-DCO

Test Case DA-08-DCO DCCIDD Version 2.0	
Case Summary:	DA-08 Acquire a physical drive with hidden sectors 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-07 All hidden 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:	brl
Test Host:	McCloud
Test Date:	Thu Oct 12 14:34:49 2006
Drives:	src(92) dst (4D-FU2) other (none)
Source Setup:	src hash (SHA1): < 63E6F7BD3040A8ADA2CF8FBF66A805B76DF10481 > src hash (MD5): < E095DD1BD0B0DD6E603153A3FE1A2F3E > 58633344 total sectors (30020272128 bytes) 58167/015/63 (max cyl/hd values) 58168/016/63 (number of cyl/hd) IDE disk: Model (WDC WD300BB-00CAA0) serial # (WD-WMA8H2140350) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 058605057 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 058605057 sectors 30005789184 bytes Hashes with DCO in place: md5:525963C6789423396FE1F3202A8CBD04 sha1.txt:55A3CFE756B7B0034DCCE71F7D7A477D8681B781
Log Highlights:	Acquisition hash: 525963C6789423396FE1F3202A8CBD04 55A3CFE756B7B0034DCCE71F7D7A477D8681B781 Rehash of Source SHA1: 55A3CFE756B7B0034DCCE71F7D7A477D8681B781
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-07 All hidden sectors acquired.	DCO not acquired
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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis:	Expected results not achieved

5.2.37 DA-09

Test Case DA-09 DCCIDD Version 2.0	
Case Summary:	DA-09 Acquire a digital source that has at least one faulty data sector.
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. AM-10 If unresolved errors occur while reading from 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 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:	brl
Test Host:	Paladin
Test Date:	Fri Dec 15 09:59:24 2006
Drives:	src(ED-BAD-CPR1) dst (82) other (ED-REF-CPR1)
Source Setup:	No before hash for ED-BAD-CPR1120103200 total sectors (61492838400 bytes) Drive with known bad sectors Vendor: Maxtor Model: DiamondMax Plus 9 Known Bad Sector List for ED-CPR-BAD-1 Manufacturer: Maxtor Model: 6Y060L0 DiamondMax Plus 9 Serial Number: Y27KR6CE Capacity: 60GB Interface: PATA 10069095, 10069911, 12023808, 18652594, 18656041, 18656857, 18660303, 18661119, 19746716-19746717, 22233904, 23098370, 23383001, 24102466-24102467, 24104250, 24106656, 24107458, 28959971-28959972, 41825791, 41828995, 52654580, 52655318, 60522984, 68643842-68643843, 69973290, 72714626, 72715293, 82148809, 82148810, 83810525, 85310861, 85313430, 85314038-85314039, 86321211, 86323780, 87186066, 87856313, 87856922, 97191260-97191261, 100093150-100093151, 103861021, 109706975-109706976, 110347947, 110350122-110350123, 115664758, 115835518
Log Highlights:	Destination setup 156301488 sectors wiped with 82 Messages displayed by tool dccidd: reading `/dev/hda': Input/output error 10069088+0 records in dccidd: reading `/dev/hda': Input/output error 10069088+1 records in dccidd: reading `/dev/hda': Input/output error 10069088+2 records in  . . . 115835160+357 records in dccidd: reading `/dev/hda': Input/output error 115835160+358 records in dccidd: reading `/dev/hda': Input/output error 115835160+359 records in

```
120102840+360 records in

Comparision of original to clone Drive
Sectors compared: 120103200
Sectors match:    120102840
Sectors differ:        360
Bytes differ:       183960
Diffs range 10069088-10069095, 10069904-10069911, 12023808-12023815,
18652592-18652599, 18656040-18656047, 18656856-18656863,
18660296-18660303, 18661112-18661119, 19746712-19746719,
22233904-22233911, 23098368-23098375, 23383000-23383007,
24102464-24102471, 24104248-24104255, 24106656-24106663,
24107456-24107463, 28959968-28959975, 41825784-41825791,
41828992-41828999, 52654576-52654583, 52655312-52655319,
60522984-60522991, 68643840-68643847, 69973288-69973295,
72714624-72714631, 72715288-72715295, 82148808-82148815,
83810520-83810527, 85310856-85310863, 85313424-85313431,
85314032-85314039, 86321208-86321215, 86323776-86323783,
87186064-87186071, 87856312-87856319, 87856920-87856927,
97191256-97191263, 100093144-100093151, 103861016-103861023,
109706968-109706983, 110347944-110347951, 110350120-110350127,
115664752-115664759, 115835512-115835519
Source (120103200) has 36198288 fewer sectors than destination (156301488)
Zero fill:               0
Src Byte fill (ED):      0
Dst Byte fill (82): 36198288
Other fill:              0
Other no fill:           0
Zero fill range:
Src fill range:
Dst fill range:  120103200-156301487
Other fill range:
Other not filled range:
0 source read errors, 0 destination read errors

Dir ../dccidd/da-09 No blockhash log
```

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.	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.	as expected
AO-23 Logged information is correct.	as expected
AO-24 Source is unchanged by acquisition.	as expected

Analysis: | Expected results not achieved

5.2.38 DA-12

Test Case DA-12 DCCIDD Version 2.0	
Case Summary:	DA-12 Attempt to create an image file where there is insufficient space.
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. AO-04 If the tool is creating an image file and there is insufficient space on the image destination device to contain the image file, the tool shall notify the user. 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:	brl
Test Host:	Max
Test Date:	Wed Oct 25 09:16:12 2006
Drives:	src(41) dst (53-IDE) other (none)
Source Setup:	src hash (SHA256): < FBF3AA21489653D880FFAE71449A9F7E8EE4F56A6C3BF58A3A3FFB13203F1B1D > src hash (SHA1): < 15CAA1A307271160D8372668BF8A03FC45A51CC9 > src hash (MD5): < 0A6A8EF78BDC14E2026710D8CCB5607C > 78125000 total sectors (40000000000 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 078107967 sectors 39991279104 bytes

Log Highlights:	Message displayed by tool
	'File size limit exceeded' displayed by dccidd
	Hash Window 7812500 bytes, Algorithms: MD5 SHA256
	Block hashes from tool for MD5
	     1 3A9A5C8B0F2A7946FC3C16DFBCB90DC3
	     2 3F938F0FFF982E369F5FC299222E2A5F
	     3 91256F5BA4F0C5CEA90DF23D5A0C8204
	  . . .
	   547 04050FD5A2272626D22EF6874176762E
	   548 F5C81CE33F5F1A358B09D659981D1463
	   549 212AC410
	Reference block hashes from source drive 41
	     1 3A9A5C8B0F2A7946FC3C16DFBCB90DC3
	     2 3F938F0FFF982E369F5FC299222E2A5F
	     3 91256F5BA4F0C5CEA90DF23D5A0C8204
	  . . .
	  5118 D21BEEAC01D1D8ABF549A3D52609DA11
	  5119 85BA27B05C255FDEFDB30C48E164972A
	  5120 987ED61480BEE01848754A763852F95E
	Block hashes from tool for SHA256
	     1 70CB211D5A579784D1A77B4A017350E788387F850A3274D9A5826B797300D227
	     2 3F22388AB1732DB4EAD46E929AE85D235843BF3E5D2FD4322D8C62120A0668F4
	     3 1871A45783E1F1C3B0A596A510387B09909ABE0CC72D3BBCF53049C3F5B8D9D0
	  . . .
	  546 3F503148CAFD9FE2186C48BD07E820473E6AAA76949CBDE4B11617EA3F351748
	  547 73B6D9B27727451FDF675CD5E924D1FF3BB0E45D9731C3BFD49FFF165A343452
	  548 5260BE9C909E26089EA171A0FD8B40D0BB8CE2D9246C1496BE8F0B2577231C11
	Reference block hashes from source drive 41
	     1 70CB211D5A579784D1A77B4A017350E788387F850A3274D9A5826B797300D227
	     2 3F22388AB1732DB4EAD46E929AE85D235843BF3E5D2FD4322D8C62120A0668F4
	     3 1871A45783E1F1C3B0A596A510387B09909ABE0CC72D3BBCF53049C3F5B8D9D0

Test Case DA-12 DCCIDD Version 2.0	
	... 5118 5BA56973A8A0FE440E2C2E718DA73B81F0FC6EC8A02050D0E144145754B9C3A4 5119 C7C9B1ED2B5E491979FB9CFD1E976C991D3DA9FC45C03D8515271ECAE2D6486C 5120 1A0FD5FC32CE152FAF33C0058EA823E9335C6E8A3A0574815534DF17282E3034 Acquisition hash: Rehash of Source SHA1: 15CAA1A307271160D8372668BF8A03FC45A51CC9
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

5.2.39   DA-14-ATA28

Test Case DA-14-ATA28 DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	JohnSteed
Test Date:	Fri Sep 29 13:15:18 2006
Drives:	src(41) dst (7B) other (4D-FU2)
Source Setup:	src hash (SHA256): < FBF3AA21489653D880FFAE71449A9F7E8EE4F56A6C3BF58A3A3FFB13203F1B1D > src hash (SHA1): < 15CAA1A307271160D8372668BF8A03FC45A51CC9 > src hash (MD5): < 0A6A8EF78BDC14E2026710D8CCB5607C > 78125000 total sectors (40000000000 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 078107967 sectors 39991279104 bytes
Log Highlights:	Destination setup 78177792 sectors wiped with 7B Comparision of original to clone Drive Sectors compared: 78125000 Sectors match: 78125000 Sectors differ: 0 Bytes differ: 0 Diffs range Source (78125000) has 52792 fewer sectors than destination (78177792) Zero fill: 0 Src Byte fill (41): 0 Dst Byte fill (7B): 52792 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 78125000-78177791 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Acquisition hash: 0A6A8EF78BDC14E2026710D8CCB5607C 15CAA1A307271160D8372668BF8A03FC45A51CC9
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

Test Case DA-14-ATA28 DCCIDD Version 2.0	
Analysis:	Expected results achieved

5.2.40   DA-14-ATA48

Test Case DA-14-ATA48 DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	AndWife
Test Date:	Mon Sep 25 17:06:37 2006
Drives:	src(4C) dst (56-IDE) other (4D-FU2)
Source Setup:	src hash (SHA1): < 8FF620D2BEDCCAFE8412EDAAD56C8554F872EFBF > src hash (MD5): < D10F763B56D4CEBA2D1311C61F9FB382 > 390721968 total sectors (200049647616 bytes) 24320/254/63 (max cyl/hd values) 24321/255/63 (number of cyl/hd) IDE disk: Model (WDC WD2000JB-00KFA0) serial # (WD-WMAMR1031111) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 390700737 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 390700737 sectors 200038777344 bytes
Log Highlights:	Destination setup 488397168 sectors wiped with 56 Comparision of original to clone Drive Sectors compared: 390721968 Sectors match: 390721968 Sectors differ: 0 Bytes differ: 0 Diffs range Source (390721968) has 97675200 fewer sectors than destination (488397168) Zero fill: 0 Src Byte fill (4C): 0 Dst Byte fill (56): 97675200 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 390721968-488397167 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Acquisition hash: D10F763B56D4CEBA2D1311C61F9FB382 8FF620D2BEDCCAFE8412EDAAD56C8554F872EFBF
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

Test Case DA-14-ATA48 DCCIDD Version 2.0
Analysis: Expected results achieved

5.2.41 DA-14-CF

Test Case DA-14-CF DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	Frank
Test Date:	Fri Dec 15 09:13:15 2006
Drives:	src(C1-CF) dst (C2-CF) other (4D-FU2)
Source Setup:	src hash (SHA256): < C7CF0218222DF80D5316511D6814266C7FA507C13F795AD3D323BB73C1590D80 > src hash (SHA1): < 5B8235178DF99FA307430C088F81746606638A0B > src hash (MD5): < 776DF8B4D2589E21DEBCF589EDC16D78 > 503808 total sectors (257949696 bytes) Model (CF) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other 2 P 168689522 1936028240 0288/115/43 0367/114/50 Boot 65 other 3 P 1869881465 1936028192 0366/032/33 0357/032/43 Boot 79 other 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 Highlights:	Destination setup 503808 sectors wiped with C2 Comparision 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 Acquisition hash: 776DF8B4D2589E21DEBCF589EDC16D78 5B8235178DF99FA307430C088F81746606638A0B

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

5.2.42 DA-14-F12

Test Case DA-14-F12 DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	Paladin
Test Date:	Wed Oct 18 15:27:55 2006
Drives:	src(43) dst (6B) other (4D-FU2)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 >
	src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 >
	78125000 total sectors (40000000000 bytes)
	Model (0BB-75JHC0) serial # (WD-WMAMC46588)
	<pre> N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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</pre>
	Partition Hashes
	43F12 md5sum 16418304 CBA0C9984F51778E89DEF0C6BED06864
	43F16 md5sum 1077479424 37E81FFB31C3CB38AA48B2237500908E
	43F32 md5sum 4301789184 2C4D8D450E5AD28329F616D87114CCFE
	43F32x md5sum 10742183424 5980CB0FA68E9862C65765DF50F00906
	43swap md5sum 2154991104 4B602964A30FE20D1B22B046A7375A7C
	43x2 md5sum 5371075584 C7A84DE9ACBCB05463604CE8823D0874
	43NTFS md5sum 14188575744 5D42FA317C802ACFEF2D313092D7411E
Log Highlights:	Destination setup
	156301488 sectors wiped with 6B
	Comparision of original to clone Partition
	Sectors compared: 32067
	Sectors match: 32067
	Sectors differ: 0
	Bytes differ: 0

```
Test Case DA-14-F12 DCCIDD Version 2.0
           Diffs range:
           run start Thu Oct 19 10:49:23 2006
           run finish Thu Oct 19 10:49:35 2006
           elapsed time 0:0:12
           Normal exit
           Acquisition hash: CBA0C9984F51778E89DEF0C6BED06864
           6853B517F50BF3CCADED3DB5FEAE08C18C62FCA0
```

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

5.2.43 DA-14-F16

Test Case DA-14-F16 DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	JohnSteed
Test Date:	Thu Oct 19 15:07:17 2006
Drives:	src(43) dst(6B) other (4D-FU2)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 >
	src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 >
	78125000 total sectors (40000000000 bytes)
	Model (0BB-75JHC0) serial # (WD-WMAMC46588)

```
 N    Start LBA Length    Start C/H/S End C/H/S  boot Partition type
 1 P 000000063 020980827 0000/001/01 1023/254/63    0C Fat32X
 2 X 020980890 057143205 1023/000/01 1023/254/63    0F extended
 3 S 000000063 000032067 1023/001/01 1023/254/63    01 Fat12
 4 x 000032130 002104515 1023/000/01 1023/254/63    05 extended
 5 S 000000063 002104452 1023/001/01 1023/254/63    06 Fat16
 6 x 002136645 004192965 1023/000/01 1023/254/63    05 extended
 7 S 000000063 004192902 1023/001/01 1023/254/63    16 other
 8 x 006329610 008401995 1023/000/01 1023/254/63    05 extended
 9 S 000000063 008401932 1023/001/01 1023/254/63    0B Fat32
10 x 014731605 010490445 1023/000/01 1023/254/63    05 extended
11 S 000000063 010490382 1023/001/01 1023/254/63    83 Linux
12 x 025222050 004209030 1023/000/01 1023/254/63    05 extended
13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00    00 empty entry
17 P 000000000 000000000 0000/000/00 0000/000/00    00 empty entry
18 P 000000000 000000000 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


Partition Hashes
43F12 md5sum 16418304 CBA0C9984F51778E89DEF0C6BED06864
43F16 md5sum 1077479424 37E81FFB31C3CB38AA48B2237500908E
43F32 md5sum 4301789184 2C4D8D450E5AD28329F616D87114CCFE
43F32x md5sum 10742183424 5980CB0FA68E9862C65765DF50F00906
43swap md5sum 2154991104 4B602964A30FE20D1B22B046A7375A7C
43x2 md5sum 5371075584 C7A84DE9ACBCB05463604CE8823D0874
43NTFS md5sum 14188575744 5D42FA317C802ACFEF2D313092D7411E
```

Log Highlights:	Destination setup
	156301488 sectors wiped with 6B
	Comparision of original to clone Partition
	Sectors compared: 2104452
	Sectors match: 2104452
	Sectors differ: 0
	Bytes differ: 0

Test Case DA-14-F16 DCCIDD Version 2.0	
	Diffs range:
	Source (2104452) has 32130 fewer sectors than destination (2136582)
	Zero fill: 0
	Src Byte fill (43): 0
	Dst Byte fill (6B): 32130
	Other fill: 0
	Other no fill: 0
	Zero fill range:
	Src fill range:
	Dst fill range: 2104452-2136581
	Other fill range:
	Other not filled range:
	run start Thu Oct 19 14:01:12 2006
	run finish Thu Oct 19 14:11:55 2006
	elapsed time 0:10:43
	Normal exit
	Acquisition hash: 37E81FFB31C3CB38AA48B2237500908E
	443CCEC9A22F726DAF6CE384817151C83B3EBC8B

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

5.2.44 DA-14-F32

Test Case DA-14-F32 DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	Max
Test Date:	Thu Oct 19 15:04:23 2006
Drives:	src(43) dst (6B) other (4D-FU2)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43F12 md5sum 16418304 CBA0C9984F51778E89DEF0C6BED06864 43F16 md5sum 1077479424 37E81FFB31C3CB38AA48B2237500908E 43F32 md5sum 4301789184 2C4D8D450E5AD28329F616D87114CCFE 43F32x md5sum 10742183424 5980CB0FA68E9862C65765DF50F00906 43swap md5sum 2154991104 4B602964A30FE20D1B22B046A7375A7C 43x2 md5sum 5371075584 C7A84DE9ACBCB05463604CE8823D0874 43NTFS md5sum 14188575744 5D42FA317C802ACFEF2D313092D7411E
Log Highlights:	Destination setup 156301488 sectors wiped with 6B Comparision of original to clone Partition Sectors compared: 8401932 Sectors match: 8401932 Sectors differ: 0 Bytes differ: 0

Test Case DA-14-F32 DCCIDD Version 2.0	
	Diffs range: Source (8401932) has 851445 fewer sectors than destination (9253377) Zero fill: 0 Src Byte fill (43): 0 Dst Byte fill (6B): 851445 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 8401932-9253376 Other fill range: Other not filled range: run start Thu Oct 19 15:50:17 2006 run finish Thu Oct 19 16:34:49 2006 elapsed time 0:44:32 Normal exit Acquisition hash: 2C4D8D450E5AD28329F616D87114CCFE 72462489BCF79A98B59B6A8CD938FEB46FA2A781
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

5.2.45 DA-14-F32X

Test Case DA-14-F32X DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	Frank
Test Date:	Mon Oct 23 10:50:27 2006
Drives:	src(43) dst (95) other (4D-FU2)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43F12 md5sum 16418304 CBA0C9984F51778E89DEF0C6BED06864 43F16 md5sum 1077479424 37E81FFB31C3CB38AA48B2237500908E 43F32 md5sum 4301789184 2C4D8D450E5AD28329F616D87114CCFE 43F32x md5sum 10742183424 5980CB0FA68E9862C65765DF50F00906 43swap md5sum 2154991104 4B602964A30FE20D1B22B046A7375A7C 43x2 md5sum 5371075584 C7A84DE9ACBCB05463604CE8823D0874 43NTFS md5sum 14188575744 5D42FA317C802ACFEF2D313092D7411E
Log Highlights:	Destination setup 58633344 sectors wiped with 95 Comparision of original to clone Partition Sectors compared: 20980827 Sectors match: 20980827 Sectors differ: 0 Bytes differ: 0

Test Case DA-14-F32X DCCIDD Version 2.0	
	Diffs range: run start Mon Oct 23 12:11:50 2006 run finish Mon Oct 23 13:58:18 2006 elapsed time 1:46:28 Normal exit Acquisition hash: 379C1AC47AF956FC8C80389C2A7427A7F8FB4E89
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

5.2.46 DA-14-FW

Test Case DA-14-FW DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	JohnSteed
Test Date:	Thu Sep 28 17:11:14 2006
Drives:	src(63-FU2) dst (2B-FU2) other (4D-FU2)
Source Setup:	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 000000000 0000/000/00 0000/000/00 00 empty entry 5 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 6 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 004192902 sectors 2146765824 bytes 3 113097537 sectors 57905938944 bytes
Log Highlights:	Destination setup 488397168 sectors wiped with 2B Comparision of original to clone Drive Sectors compared: 117304992 Sectors match: 117304992 Sectors differ: 0 Bytes differ: 0 Diffs range Source (117304992) has 371092176 fewer sectors than destination (488397168) Zero fill: 0 Src Byte fill (63): 0 Dst Byte fill (2B): 371092176 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 117304992-488397167 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Acquisition hash: EE217BC4FA4F3D1B4021D29B065AA9EC F7069EDCBEAC863C88DECED82159F22DA96BE99B
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

Test Case DA-14-FW DCCIDD Version 2.0	
Analysis:	Expected results achieved

5.2.47 DA-14-NT

Test Case DA-14-NT DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	Max
Test Date:	Fri Oct 20 10:51:21 2006
Drives:	src(43) dst (6B) other (4D-FU2)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) <pre> N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43F12 md5sum 16418304 CBA0C9984F51778E89DEF0C6BED06864 43F16 md5sum 1077479424 37E81FFB31C3CB38AA48B2237500908E 43F32 md5sum 4301789184 2C4D8D450E5AD28329F616D87114CCFE 43F32x md5sum 10742183424 5980CB0FA68E9862C65765DF50F00906 43swap md5sum 2154991104 4B602964A30FE20D1B22B046A7375A7C 43x2 md5sum 5371075584 C7A84DE9ACBCB05463604CE8823D0874 43NTFS md5sum 14188575744 5D42FA317C802ACFEF2D313092D7411E</pre>
Log Highlights:	Destination setup 156301488 sectors wiped with 6B Comparision of original to clone Partition Sectors compared: 27712062 Sectors match: 27712062 Sectors differ: 0 Bytes differ: 0

Test Case DA-14-NT DCCIDD Version 2.0	
	Diffs range: Source (27712062) has 2779245 fewer sectors than destination (30491307) Zero fill: 0 Src Byte fill (43): 0 Dst Byte fill (6B): 2779244 Other fill: 0 Other no fill: 1 Zero fill range: Src fill range: Dst fill range: 27712062-30491305 Other fill range: Other not filled range: 30491306 run start Fri Oct 20 12:52:30 2006 run finish Fri Oct 20 15:19:20 2006 elapsed time 2:26:50 Normal exit Acquisition hash: F55B0901A6C4AE1B726C36DCB1C1E534B65975B6D5B028FC3B5547FAF7B3A244
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

5.2.48   DA-14-SATA28

Test Case DA-14-SATA28 DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	Frank
Test Date:	Wed Oct 4 09:29:45 2006
Drives:	src(07) dst (1B) other (4D-FU2)
Source Setup:	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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 156280257 sectors 80015491584 bytes
Log Highlights:	Destination setup 234441648 sectors wiped with 1B Comparision of original to clone Drive Sectors compared: 156301488 Sectors match: 156301488 Sectors differ: 0 Bytes differ: 0 Diffs range Source (156301488) has 78140160 fewer sectors than destination (234441648) Zero fill: 0 Src Byte fill (07): 0 Dst Byte fill (1B): 78140160 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 156301488-234441647 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Acquisition hash: 2EAF712DAD80F66E30DEA00365B4579B 655E9BDDB36A3F9C5C4CC8BF32B8C5B41AF9F52E
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

5.2.49 DA-14-SATA48

Test Case DA-14-SATA48 DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	Frank
Test Date:	Tue Oct 3 12:49:33 2006
Drives:	src(16) dst (0F) other (4D-FU2)
Source Setup:	src hash (SHA1): < F82982A9C63133988C1D2B4DA7C9C25CCA2D77A5 > src hash (MD5): < 7BB1D64D47671ED3E69130A2AD08FA02 > 312581808 total sectors (160041885696 bytes) 19456/254/63 (max cyl/hd values) 19457/255/63 (number of cyl/hd) Model (WDC WD1600JD-00G) serial # (WD-WMAES2058252) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 312560577 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 312560577 sectors 160031015424 bytes
Log Highlights:	Destination setup 488397168 sectors wiped with F Comparision of original to clone Drive Sectors compared: 312581808 Sectors match: 312581808 Sectors differ: 0 Bytes differ: 0 Diffs range Source (312581808) has 175815360 fewer sectors than destination (488397168) Zero fill: 0 Src Byte fill (16): 0 Dst Byte fill (0F): 175815360 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 312581808-488397167 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Acquisition hash: 7BB1D64D47671ED3E69130A2AD08FA02 F82982A9C63133988C1D2B4DA7C9C25CCA2D77A5
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

Test Case DA-14-SATA48 DCCIDD Version 2.0	
Analysis:	Expected results achieved

5.2.50   DA-14-SCSI

Test Case DA-14-SCSI DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	AndWife
Test Date:	Tue Sep 26 14:51:56 2006
Drives:	src(2A) dst (E6) other (4D-FU2)
Source Setup:	src hash (SHA256): < AE8E839101661367D92803D5F5D408268635EFD8A05FEA633838CDC3919F5ABA > src hash (SHA1): < F5F9F2903DCAB895F36E270FB22A722E27918125 > src hash (MD5): < 91E0AC905F682ECF6DE4E9835089B519 > 17783249 total sectors (9105023488 bytes) Model (QM39100TD-SCA) serial # (PCB=20-116711-06 HDAQM39100TD-SCA) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 017751762 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 017751762 sectors 9088902144 bytes
Log Highlights:	Destination setup 35843670 sectors wiped with E6 Comparision of original to clone Drive Sectors compared: 17783249 Sectors match: 17783249 Sectors differ: 0 Bytes differ: 0 Diffs range Source (17783249) has 18060421 fewer sectors than destination (35843670) Zero fill: 0 Src Byte fill (2A): 0 Dst Byte fill (E6): 18060421 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 17783249-35843669 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Acquisition hash: 91E0AC905F682ECF6DE4E9835089B519 F5F9F2903DCAB895F36E270FB22A722E27918125
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

Test Case DA-14-SCSI DCCIDD Version 2.0	
Analysis:	Expected results achieved

5.2.51 DA-14-SWAP

Test Case DA-14-SWAP DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	Max
Test Date:	Fri Oct 20 15:56:37 2006
Drives:	src(43) dst (6B) other (4D-FU2)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 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 Partition Hashes 43F12 md5sum 16418304 CBA0C9984F51778E89DEF0C6BED06864 43F16 md5sum 1077479424 37E81FFB31C3CB38AA48B2237500908E 43F32 md5sum 4301789184 2C4D8D450E5AD28329F616D87114CCFE 43F32x md5sum 10742183424 5980CB0FA68E9862C65765DF50F00906 43swap md5sum 2154991104 4B602964A30FE20D1B22B046A7375A7C 43x2 md5sum 5371075584 C7A84DE9ACBCB05463604CE8823D0874 43NTFS md5sum 14188575744 5D42FA317C802ACFEF2D313092D7411E
Log Highlights:	Destination setup 156301488 sectors wiped with 6B Comparision of original to clone Partition Sectors compared: 4208967 Sectors match: 4208967 Sectors differ: 0 Bytes differ: 0

Test Case DA-14-SWAP DCCIDD Version 2.0	
	Diffs range:
	run start Fri Oct 20 17:04:05 2006
	run finish Fri Oct 20 17:26:50 2006
	elapsed time 0:22:45
	Normal exit
	Acquisition hash: 4B602964A30FE20D1B22B046A7375A7C
	F5B062CC31DA088DF7FAF8F7A47E500BF4244BCF
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

5.2.52 DA-14-THUMB

Test Case DA-14-THUMB DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	Paladin
Test Date:	Thu Oct 19 17:50:26 2006
Drives:	src(D2-THUMB) dst (D5-THUMB) other (02)
Source Setup:	src hash (SHA256): < ECA93D932C8069B03C36E5AD99A163688C2A6313421D843F46E675567777E8C7 > src hash (SHA1): < 712C9F59F598745977E4E19F235F83CE8F4EC7BA > src hash (MD5): < EA06F74BE51D0730B3F7079D7A3D5AE8 > 253400 total sectors (129740800 bytes) Model (TS128MJFLASHA) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other 2 P 168689522 1936028240 0288/115/43 0367/114/50 Boot 65 other 3 P 1869881465 1936028192 0366/032/33 0357/032/43 Boot 79 other 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 Highlights:	Destination setup 505856 sectors wiped with D5 Comparision of original to clone Drive Sectors compared: 253400 Sectors match: 253400 Sectors differ: 0 Bytes differ: 0 Diffs range Source (253400) has 252456 fewer sectors than destination (505856) Zero fill: 0 Src Byte fill (D2): 0 Dst Byte fill (D5): 252456 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 253400-505855 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Acquisition hash: EA06F74BE51D0730B3F7079D7A3D5AE8 712C9F59F598745977E4E19F235F83CE8F4EC7BA ECA93D932C8069B03C36E5AD99A163688C2A6313421D843F46E675567777E8C7
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

Test Case DA-14-THUMB DCCIDD Version 2.0		
	AO-17 Excess sectors are unchanged.	as expected
	AO-23 Logged information is correct.	as expected
Analysis:	Expected results achieved	

5.2.53   DA-14-USB

Test Case DA-14-USB DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	JohnSteed
Test Date:	Fri Sep 29 10:34:29 2006
Drives:	src(24-FU2) dst (33-FU2) other (4D-FU2)
Source Setup:	src hash (SHA1): < A78EDB5E90298D0CDF199B4B62119F81208A252A > src hash (MD5): < 90311DDF672B8CBA0869A46F4A455A7E > 39070080 total sectors (20003880960 bytes) 19076/063/32 (max cyl/hd values) 19077/064/32 (number of cyl/hd) Model (ATCS04-0) serial # (CSH206D9DSEL)
Log Highlights:	Destination setup 58605120 sectors wiped with 33 Comparision of original to clone Drive Sectors compared: 39070080 Sectors match: 39070080 Sectors differ: 0 Bytes differ: 0 Diffs range Source (39070080) has 19535040 fewer sectors than destination (58605120) Zero fill: 0 Src Byte fill (24): 0 Dst Byte fill (33): 19535040 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 39070080-58605119 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Acquisition hash: 90311DDF672B8CBA0869A46F4A455A7E A78EDB5E90298D0CDF199B4B62119F81208A252A
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

5.2.54   DA-14-X2

Test Case DA-14-X2 DCCIDD Version 2.0	
Case Summary:	DA-14 Create an unaligned clone from an image file.
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 Name:	brl
Test Host:	AndWife
Test Date:	Sun Dec 24 14:05:35 2006
Drives:	src(43) dst (90) other (4D-FU2)
Source Setup:	src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 >
	src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 >
	78125000 total sectors (40000000000 bytes)
	Model (0BB-75JHC0) serial # (WD-WMAMC46588)

```
 N   Start LBA Length   Start C/H/S End C/H/S  boot Partition type
 1 P 000000063 020980827 0000/001/01 1023/254/63    0C Fat32X
 2 X 020980890 057143205 1023/000/01 1023/254/63    0F extended
 3 S 000000063 000032067 1023/001/01 1023/254/63    01 Fat12
 4 x 000032130 002104515 1023/000/01 1023/254/63    05 extended
 5 S 000000063 002104452 1023/001/01 1023/254/63    06 Fat16
 6 x 002136645 004192965 1023/000/01 1023/254/63    05 extended
 7 S 000000063 004192902 1023/001/01 1023/254/63    16 other
 8 x 006329610 008401995 1023/000/01 1023/254/63    05 extended
 9 S 000000063 008401932 1023/001/01 1023/254/63    0B Fat32
10 x 014731605 010490445 1023/000/01 1023/254/63    05 extended
11 S 000000063 010490382 1023/001/01 1023/254/63    83 Linux
12 x 025222050 004209030 1023/000/01 1023/254/63    05 extended
13 S 000000063 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 000000000 000000000 0000/000/00 0000/000/00    00 empty entry
17 P 000000000 000000000 0000/000/00 0000/000/00    00 empty entry
18 P 000000000 000000000 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


Partition Hashes
43F12 md5sum 16418304 CBA0C9984F51778E89DEF0C6BED06864
43F16 md5sum 1077479424 37E81FFB31C3CB38AA48B2237500908E
43F32 md5sum 4301789184 2C4D8D450E5AD28329F616D87114CCFE
43F32x md5sum 10742183424 5980CB0FA68E9862C65765DF50F00906
43swap md5sum 2154991104 4B602964A30FE20D1B22B046A7375A7C
43x2 md5sum 5371075584 C7A84DE9ACBCB05463604CE8823D0874
43NTFS md5sum 14188575744 5D42FA317C802ACFEF2D313092D7411E
Excess destination partition sectors hash:
CMD: ./machash.csh DA-14-X2 Max brl /dev/sdb5 90 -before -winsize
5371075584 -new_log
SHA1 0 - 5371075583 = 87D31CB126201B6A2DC211A2E9B80563437A5583
SHA1 5371075584 - 6201828863 = 00D22C5C7381D110DCD895E29016943DFE5A6E18
```

Log Highlights:	Destination setup
	58633344 sectors wiped with 90

```
Test Case DA-14-X2 DCCIDD Version 2.0
              Comparision of original to clone Partition
              Sectors compared:    10490382
              Sectors match:       10490382
              Sectors differ:           0
              Bytes differ:             0
              Diffs range:
              Source (10490382) has 1622565 fewer sectors than destination (12112947)
              Zero fill:     50984
              Src Byte fill (43): 0
              Dst Byte fill (90): 1566531
              Other fill:    100
              Other no fill: 4950
              Zero fill range:  10502147, 10502195, 10502197, 10502200-10502711,
              10518531, 10518579, 10518581, 10518584-10519095, 10534915,
              10534963, 10534965, 10534968-10535479, 10551299, 10551347,
              10551349, 10551352-10551863, 10567683, 10567731, 10567733,
              10567736-10568247. . . + 48409 more
              Src fill range:
              Dst fill range:  10490382-10502145, 10502712-10518529,
              10519096-10534913, 10535480-10551297, 10551864-10567681,
              10568248-10584065, 10584632-10600449, 10601016-10616833,
              10617400-10633217, 10633784-10649601, 10650168-10665985,
              10666552-10682369, 10682936-10698753, 10699320-10715137,
              10715704-10731521, 10732088-10747905, 10748472-10764289,
              10764856-10780673, 10781240-10797057, 10797624-10813441. . . + 1254225 more
              Other fill range:  10502199, 10518583, 10534967, 10551351,
              10567735, 10584119, 10600503, 10616887, 10633271, 10649655,
              10666039, 10682423, 10698807, 10715191, 10731575, 10747959,
              10764343, 10780727, 10797111, 10813495. . . + 80 more
              Other not filled range:  10502146, 10502148-10502194,
              10502196, 10502198, 10518530, 10518532-10518578, 10518580,
              10518582, 10534914, 10534916-10534962, 10534964, 10534966,
              10551298, 10551300-10551346, 10551348, 10551350, 10567682,
              10567684-10567730, 10567732, 10567734. . . + 4700 more
              run start Sun Dec 24 15:11:45 2006
              run finish Sun Dec 24 15:30:29 2006
              elapsed time 0:18:44
              Normal exit
              Acquisition hash: C7A84DE9ACBCB05463604CE8823D0874
              61F0030EDB667BA43A26A24A9A25281817537D2261D687F7EDCB32B5E60E39E7

              Excess destination partition sectors hash:
              CMD: ./machash.csh DA-14-X2 Max brl /dev/sdb5 90 -after -winsize 5371075584
              -new_log
              SHA1 0 - 5371075583 = 283BCC32DE892C12C37698AF7E38703619E57F57
              SHA1 5371075584 - 6201828863 = 00D22C5C7381D110DCD895E29016943DFE5A6E18
```

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

5.2.55 DA-17

Test Case DA-17 DCCIDD Version 2.0	
Case Summary:	DA-17 Create a truncated clone from an image file.
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-19 If there is insufficient space to create a 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 notifies the user. AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.
Tester Name:	brl
Test Host:	Paladin
Test Date:	Tue Dec 5 16:21:01 2006
Drives:	src(41) dst (95) other (4D-FU2)
Source Setup:	src hash (SHA256): < FBF3AA21489653D880FFAE71449A9F7E8EE4F56A6C3BF58A3A3FFB13203F1B1D > src hash (SHA1): < 15CAA1A307271160D8372668BF8A03FC45A51CC9 > src hash (MD5): < 0A6A8EF78BDC14E2026710D8CCB5607C > 78125000 total sectors (40000000000 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 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 078107967 sectors 39991279104 bytes
Log Highlights:	Destination setup 58633344 sectors wiped with 95 Message displayed by tool 58633216 blocks (28629 Mb) written. dccidd: writing `/dev/hdb': No space left on device 58633345+0 records in 58633344+0 records out Comparision of original to clone Drive Sectors compared: 58633344 Sectors match: 58633344 Sectors differ: 0 Bytes differ: 0 Diffs range Source (78125000) has 19491656 more sectors than destination (58633344) 0 source read errors, 0 destination read errors Dir ../dccidd/da-17 No blockhash 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-19 Truncated clone is created.	as expected
AO-20 User notified that clone is truncated.	as expected
AO-23 Logged information is correct.	as expected

Analysis:	Expected results achieved

About the National Institute of Justice

NIJ is the research, development, and evaluation agency of the U.S. Department of Justice. NIJ's mission is to advance scientific research, development, and evaluation to enhance the administration of justice and public safety. NIJ's principal authorities are derived from the Omnibus Crime Control and Safe Streets Act of 1968, as amended (see 42 U.S.C. §§ 3721–3723).

The NIJ Director is appointed by the President and confirmed by the Senate. The Director establishes the Institute's objectives, guided by the priorities of the Office of Justice Programs, the U.S. Department of Justice, and the needs of the field. The Institute actively solicits the views of criminal justice and other professionals and researchers to inform its search for the knowledge and tools to guide policy and practice.

Strategic Goals

NIJ has seven strategic goals grouped into three categories:

Creating relevant knowledge and tools

1. Partner with State and local practitioners and policymakers to identify social science research and technology needs.
2. Create scientific, relevant, and reliable knowledge—with a particular emphasis on terrorism, violent crime, drugs and crime, cost-effectiveness, and community-based efforts—to enhance the administration of justice and public safety.
3. Develop affordable and effective tools and technologies to enhance the administration of justice and public safety.

Dissemination

4. Disseminate relevant knowledge and information to practitioners and policymakers in an understandable, timely, and concise manner.
5. Act as an honest broker to identify the information, tools, and technologies that respond to the needs of stakeholders.

Agency management

6. Practice fairness and openness in the research and development process.
7. Ensure professionalism, excellence, accountability, cost-effectiveness, and integrity in the management and conduct of NIJ activities and programs.

Program Areas

In addressing these strategic challenges, the Institute is involved in the following program areas: crime control and prevention, including policing; drugs and crime; justice systems and offender behavior, including corrections; violence and victimization; communications and information technologies; critical incident response; investigative and forensic sciences, including DNA; less-than-lethal technologies; officer protection; education and training technologies; testing and standards; technology assistance to law enforcement and corrections agencies; field testing of promising programs; and international crime control.

In addition to sponsoring research and development and technology assistance, NIJ evaluates programs, policies, and technologies. NIJ communicates its research and evaluation findings through conferences and print and electronic media.

To find out more about the National Institute of Justice, please visit:

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