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Test Results for Disk Imaging Tools: SafeBack 2.18

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Contents

Introduction

The Computer Forensics Tool Testing (CFTT) project is the joint effort of the National Institute of Justice, the National Institute of Standards and Technology (NIST), the U.S. Department of Defense, the Technical Support Working Group, and other related agencies. The objective of the CFTT project 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.

The test results provide the information necessary for developers to improve tools, users to make informed choices, and the legal community and others to understand the tools' capabilities. The use of well-recognized methodologies for conformance and quality testing serves as the foundation of our approach for testing computer forensics tools. Plus, in an effort to further develop the specifications and test methods, we encourage the entire forensics community to visit the CFTT Web site (*http://www.cftt.nist.gov*), where drafts are accessible for both commentary and review.

This document reports the results from testing SafeBack 2.18, one commonly used disk imaging tool, against *Disk Imaging Tool Specification, Version 3.1.6,* developed by CFTT staff and available at *http://www.cftt.nist.gov/DI-spec-3-1-6.doc*. This specification identifies the top-level disk imaging tool requirements as—

- The tool shall make a bit-stream duplicate or an image of an original disk or partition.
- The tool shall not alter the original disk.
- The tool shall log I/O errors.
- The tool's documentation shall be correct.

Note: The test methodology is for software tools that copy or image hard disk drives. It does not cover analog media or digital media such as cell phones or personal digital assistants (PDAs).

Test Results for Disk Imaging Tools: SafeBack 2.18

Tool Tested: SafeBack
Version: 2.18 (February 13, 2001)
Operating System: PC-DOS 6.3 and Windows 98 DOS (Version 4.10.2222)
Supplier: New Technologies, Inc. (SafeBack formerly owned by Sydex, Inc.)
Address: 2075 NE Division Street
Gresham, OR 97030
Phone: 503–661–6912
Web: *http://www.forensics-intl.com*

1. Results Summary by Requirements

The tool shall make a bit-stream duplicate or an image of an original disk or partition.
SafeBack, with two exceptions, copied all the disk sectors correctly and completely in the test cases that were run. The exceptions were the following:

1. For a certain partition type (FAT32), two file system control values (not part of any data file) are adjusted as a side effect of the copy. This adjustment is confined to 8 bytes of sector 1 of the partition and had no effect on any sectors used in data files.
2. If the basic input/output system (BIOS) interface is chosen to access integrated drive electronics (IDE) hard drives on an older computer using a legacy BIOS that underreports the number of cylinders on the drive, then some but not all sectors will be accessed in an area of the disk that is not used by either commercial software or Microsoft operating systems. If direct access using the advanced technology attachment (ATA) interface is chosen instead, SafeBack accesses every sector of the hard drive.

The tool shall not alter the original disk.
For all the test cases that were run, SafeBack never altered the original hard drive.

The tool shall be able to verify the integrity of a disk image file.
For all of the test cases that were run, SafeBack always identified image files that had been modified.

The tool shall log I/O errors.
For all of the test cases that were run, SafeBack always logged I/O errors.

The tool's documentation shall be correct.
The tool documentation available was the *SafeBack Reference Manual, Version 2.0*, Second Edition, October 2001. There was no documentation identified for Version 2.18. In some cases, the software behavior was not documented or was ambiguous.

2. Anomalies

This section describes four anomalies found during the testing of SafeBack 2.18 against the disk imaging requirements described in *Disk Imaging Tool Specification*, *Version 3.1.6*. The behavior observed in these anomalies should not be interpreted as necessarily representing unacceptable behavior for an imaging tool. Some of the anomalies may only need more detailed documentation by the tool vendor. However, the tool user must be aware of these behaviors since they may affect the quality and completeness of a forensic investigation.

The following anomalies were found:

1. **BIOS anomaly.** For IDE hard drives on computers with a legacy BIOS, if the legacy BIOS underreports the number of cylinders on the drive and the BIOS is used to access the drive, then there may be a small area of sectors at the end of the drive that are not accessed. The sectors in this area are not used by most commercial software.
2. **Backfill anomaly.** The *zero backfill* option did not always function as documented.
3. **Cylinder alignment anomaly.** The results of using the *cylinder alignment* option are not completely documented. For example, the last sector of a FAT partition is relocated unexpectedly on the destination.
4. **FAT32 anomaly.** Two fields of file system control information from the source are changed on the destination.

The scope of each anomaly is indicated in Table 2-1. An anomaly can manifest either in an image file, a restored copy, or both. A restored copy means a copy of the original drive produced by either the SafeBack **restore** or **copy** operations.

Table 2-1. Scope of Anomalies

Anomaly	Scope
BIOS	Image and restored copy.
Backfill	Restored copy.
Cylinder Alignment	Restored copy.
FAT32	Restored copy. Presence of the anomaly in an image file was not investigated.

Note that the BIOS anomaly was observed only if a hard drive was accessed through the BIOS on a computer that had a BIOS that does not support the extensions defined in *ANSI INCITS 347-2001 BIOS Enhanced Disk Drive Services*. The BIOS anomaly was not observed if a computer with the BIOS extensions was used or if a computer with a legacy BIOS was used with **direct access** selected instead of **BIOS access**. The FAT32 anomaly only occurs if a FAT32 partition is restored; if an entire disk containing a FAT32 partition is imaged and restored, no anomaly occurs.

2.1 Sectors Missed in Legacy BIOS Access

A legacy BIOS is defined as a BIOS that does not implement the extensions to interrupt 13h BIOS services described in the standard *ANSI INCITS 347-2001 BIOS Enhanced Disk Drive Services*. This standard was developed by T13, a Technical Committee for the InterNational Committee on Information Technology Standards (INCITS), under *Project 1386D, BIOS Enhanced Disk Drive Services*. INCITS is accredited by and operates under rules approved by the American National Standards Institute (ANSI). Further information is available at *http://www.t13.org*.

An extended BIOS (referred to as XBIOS) is defined as a BIOS that implements the extensions to interrupt 13h BIOS services described in *ANSI INCITS 347-2001 BIOS Enhanced Disk Drive Services*.

SafeBack does not access (i.e., read or write) all usable sectors on the hard drive if the legacy BIOS underreports the size of the hard drive and SafeBack uses BIOS access rather than direct access by the ATA interface. If this anomaly occurs while reading a source drive, the SafeBack image file will be missing a small number of sectors from the end of the hard drive. If this anomaly occurs during *zero backfilling* of the destination drive, the backfilling is not done for a small number of sectors at the end of the hard drive. When the anomaly occurs during the restore of an image, then part of the image at the end of the destination hard drive might not be restored. These sectors at the end of a hard drive are not normally used on a system with a legacy BIOS for any purpose by Microsoft operating systems or by typical application programs. These sectors are accessible only by special tools from a Microsoft operating system. However, these sectors could be used by other operating systems such as Linux or FreeBSD UNIX.

A physical hard drive may have a different physical geometry from the logical geometry presented by the BIOS. This is because the legacy BIOS interface can only present a hard drive with less than 1,024 cylinders. If a hard drive is being accessed by the BIOS and the physical drive contains more than 1,024 cylinders, then the BIOS presents an adjusted (logical) drive geometry with fewer than 1,024 cylinders by increasing the heads per cylinder value and decreasing the number of cylinders value. In a DOS environment, a drive is usually accessed through the BIOS, but software can directly access the physical drive if the necessary device driver is available. For example, the Quantum Sirocco model 1700A has the direct physical and BIOS access parameters presented in Table 2-2.

Table 2-2. Example of Direct ATA versus BIOS Hard Drive Geometry

Access	Cylinders	Heads	Sectors per Head	Sectors per Cylinder	Total Sectors
Direct	3,309	16	63	1,008	3,335,472
BIOS	826	64	63	4,032	3,330,432

Note that 5,040 more sectors (3,335,472 minus 3,330,432) can be accessed through direct ATA than are reported by the legacy BIOS. SafeBack copies one extra logical cylinder (4,032 sectors as reported by the BIOS) but misses the last physical cylinder of 1,008 sectors. For example, in test case DI-007, the last 1,008 sectors of the source are not copied to the destination, and in test case DI-063, the last 1,008 sectors of the destination are not zero backfilled.

Test cases: DI-001, DI-005, DI-006, DI-007, DI-062, DI-063, DI-064, DI-066, and DI-069.

2.2   Backfill Not as Expected

The *zero backfill* menu option was sometimes ignored. The *SafeBack Reference Manual, Version 2.0* (in an addendum dated November 1999) states that the *zero backfill* menu option "When enabled . . .[SafeBack writes] binary 00 to unused space." However, for all executed test cases, disk **copy** and **restore** operations to a larger destination were backfilled even when the zero backfill menu option was set to **no**. Additional investigation suggested that the trigger for the anomaly might be the setting of the *adjust partitions* option. If the menu option is set to **no** and the *zero backfill* menu option is also set to **no**, zero backfill was done anyway. However, if the *adjust partitions* option was set to **auto,** zero backfill was not done. Disk operations requesting zero backfill were zero backfilled correctly.

For partition operations the addendum states: "[for partition operations the] menu selection will have no effect on the backfilling performed between partitions, which is always enabled." In other words, the zero backfill should always be done to the end of a partition regardless of the menu selection. The menu option refers only to the space between the end of the last partition and the end of the physical disk (i.e., for disk operations only). However, there was no zero backfilling of partition operations.

Test cases: DI-001, DI-009, DI-010, DI-018, DI-024, DI-025, DI-031, DI-044, DI-050, DI-056, DI-059, DI-062, DI-063, DI-071, DI-072, DI-091, DI-092, DI-100, DI-101, DI-120, DI-121, DI-129, DI-130, DI-149, DI-150, DI-154, DI-155, DI-159, DI-160, DI-162, and DI-163.

2.3   Cylinder Alignment Anomaly

If SafeBack is used to copy a physical hard drive to another physical hard drive of a different geometry, then it can optionally reposition partitions to disk cylinder boundaries. The method of cylinder alignment described in the SafeBack documentation is to add sectors to the end of each partition as it is copied to the destination, so that each destination partition uses all the sectors of the last cylinder of the partition. However, in some test cases, SafeBack copied all but the last sector to the destination partition, filled it with zeros, and then copied the last sector to the last sector on the destination partition. All data were copied to the destination but not necessarily where an investigator might expect to find it. The boot tracks were modified to reflect the relocation and resizing of the partitions.

Consider test case DI-003. The source disk has 6 partitions, 2 FAT16, 1 hidden FAT16, 2 Linux, and 1 Linux swap. The disk comparison operation divides the disk into contiguous blocks of sectors based on the disk partition table. These blocks (called regions) are categorized as either boot tracks, partitions, or unallocated space. Each disk sector is located in one region. Each region can then be compared. For more detail about the comparison of disks with cylinder adjustment see *FS-TST: Forensic Software Testing Support Tools* at *http://www.cftt.nist.gov*.

For test case DI-003, there are 4 boot tracks, 6 partitions, and 5 unallocated regions for a total of 15 regions. Table 2-3 is the comparison summary from the comparison log file for test case DI-003.

Table 2-3. Test Case DI-003 Comparison Summary

```
Boot tracks   4              252 diffs             4
Partitions    6        2,241,540 diffs             9
Unallocated   5        1,093,680 diffs         1,009
Total src sectors      3,335,472
Partition excess          76,671 zero      74,189 non-zero        2,482
Disk excess            9,260,307 zero      10,363 non-zero    9,249,944
Total dst sectors     12,672,450
```

The first three rows summarize the comparison of source to destination sectors. The format of the first three rows is a category name, the number of regions in the category, total number of sectors in the category, the word *diffs*, and the number of sectors that are different between the source and the destination. For example, there are 4 boot tracks and each boot track has 63 sectors, for a total of 252 sectors allocated to boot tracks. There are 4 boot track sectors that have differences between the source sector and the destination sector.

The fourth line gives the total number of sectors on the source drive.

The next two lines summarize the destination sectors that do not correspond to any source sectors. The first category describes sectors added to destination partitions to fill out a partition to a cylinder boundary. The second category describes the excess sectors at the end of the disk. The three values represent the total number of sectors in the category, the number of sectors zero backfilled, and the number of sectors with some non-zero content.

The last line indicates the total number of sectors on the destination hard drive.

Each of the four boot tracks has had one sector modified to reflect the relocation and resizing of partitions. Also sector 0 of each partition is modified for the same reason. These modifications are as expected. However, three additional sectors in the partition category are reported to differ from the original source. In each of the three partitions with the additional sector reported to differ from the source, the last sector of the source is present on the destination but at an unexpected location separate from the other sectors copied to the destination. Consider the details for region 1 of test case DI-003. Region 1 is a FAT16 source partition with 1,229,697 sectors being copied to a destination partition with 7,245 excess sectors (for a total of 1,236,942 sectors). The last sector from the source is not copied to the corresponding destination location

but is copied to the last excess sector of the destination (i.e., sector 1,237,004)[1] rather than to the expected location of 1,229,696. The sector relocation is not apparent from the summary table but can be verified by an examination of the log file details.

The sectors of the five unallocated regions were copied completely with two exceptions. The BIOS anomaly accounts for 1,008 sectors not being copied. This leaves region 10 as the one remaining sector. This region is a hidden FAT16 partition, and the last sector of the source is relocated to the last excess sector.

From the results and SafeBack documentation, it is unclear what the zero backfill results should be.

In summary, the cylinder alignment operation exhibits the following behaviors:

1. Partition table adjustments are as expected.
2. Except for the legacy BIOS anomaly, all source sectors not requiring partition table adjustments are copied accurately to the destination.
3. The last sector of a FAT source partition is relocated to the last sector of the excess destination sectors added for partition alignment. This occurs even when the partition is hidden.
4. The zero backfill results are unclear.

Test cases: DI-003, DI-004, DI-046, and DI-047.

2.4   Sector Change in FAT32 Operation

In FAT32 partition operations, sector 1 of the destination differs in 4 to 8 bytes beginning at offset 488 of sector 1 of the source. This sector, the **FSInfo** sector,[2] contains control information for the FAT32 file system. It appears that SafeBack sets the **FSI_Free_Count** field to 0xFFFFFFFF. This value indicates that the free cluster count is unknown and the actual value should be computed. Also, the **FSI_Nxt_Free** field is adjusted.

Table 2-4 is extracted from page 21 of *Microsoft Extensible Firmware Initiative FAT32 File System Specification FAT: General Overview of On-Disk Format* (see footnote 2).

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[1] Note that there is a 63 sector offset that needs to be applied to 1,236,942 to get 1,237,004. Also, note that sector addresses start at zero.

[2] This sector is documented in *Microsoft Extensible Firmware Initiative FAT32 File System Specification FAT: General Overview of On-Disk Format*. This document can be found on the Microsoft Web site at *http://www.microsoft.com/hwdev/download/hardware/FATGEN103.doc*.

Table 2-4. FAT32 FSInfo Sector Control Fields Modified by SafeBack

Name	Offset (byte)	Size (bytes)	Description
`FSI_Free_Count`	488	4	Contains the last known free cluster count on the volume. If the value is 0xFFFFFFFF, then the free count is unknown and must be computed. Any other value can be used, but is not necessarily correct. It should be range checked at least to make sure it is <= volume cluster count.
`FSI_Nxt_Free`	492	4	This is a hint for the FAT driver. It indicates the cluster number at which the driver should start looking for free clusters. Because a FAT32 FAT is large, it can be rather time consuming if there are a lot of allocated clusters at the start of the FAT and the driver starts looking for a free cluster starting at cluster 2. Typically this value is set to the last cluster number that the driver allocated. If the value is 0xFFFFFFFF, then there is no hint and the driver should start looking at cluster 2. Any other value can be used, but should be checked first to make sure it is a valid cluster number for the volume.

Test cases: DI-015, DI-017, DI-025, DI-027, DI-030, DI-041, DI-072, DI-081, DI-083, DI-089, DI-101, DI-108, DI-118, DI-130, DI-138, DI-139, DI-141, DI-145, and DI-147.

3. Test Case Selection

Not all of the 168 test cases specified in *Disk Imaging Tool Specification, Version 3.1.6* apply to SafeBack. Of the 168 test cases specified, 112 cases were applied to SafeBack, and 56 cases were not run.

The primary criterion for selecting a test case is that there must be a tool feature covered by the objective of the test case as defined by the test case summary from *Disk Imaging Tool Specification, Version 3.1.6*. For example, test case DI-001 calls for the following setup: Copy a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is smaller than the destination. Since every parameter specified in the setup can be applied to SafeBack, test case DI-001 is used. However, test case DI-013—logical copy of a Linux (i.e., ext2 or ext3) partition—is not used because SafeBack does not allow selection of logical drive formatted as a Linux partition for the **copy** operation.

The 56 cases that were not run were eliminated for one or more of the following reasons (see Table 3-1 for details):

- SafeBack does not support partition (logical drive) operations (copy restore or backup) on NTFS or Linux ext2 partitions.
- Some test cases are going to be deleted from the test specification and are never used to test any disk imaging tools. For example, cases involving deleted file recovery are being deleted from the specification because deleted file recovery tools will be tested separately.
- Some test cases require support software or other tools that are not available. For example, some test cases specify I/O error simulation beyond the scope of the current tools.

Table 3-1. Test Cases Not Applied to SafeBack

Case	Reason Case Not Used
DI-011	Unsupported operation.
DI-012	Unsupported partition type.
DI-013	Case deleted, unsupported partition type.
DI-026	Case deleted, unsupported partition type.
DI-028	Unsupported partition type.
DI-029	Unsupported partition type.
DI-037	Unsupported partition type.
DI-038	Unsupported partition type.
DI-039	Case deleted.
DI-042	Unsupported partition type.
DI-043	Unsupported partition type.
DI-052	Case deleted.
DI-053	Case deleted.
DI-073	Unsupported partition type.
DI-074	Unsupported partition type.
DI-075	Case deleted.
DI-076	Case deleted.
DI-077	Case deleted, unsupported partition type.
DI-078	Case deleted, unsupported partition type.
DI-079	Unsupported partition type.
DI-080	Unsupported partition type.
DI-084	Unsupported partition type.
DI-085	Unsupported partition type.
DI-086	Beyond scope of err simulator.
DI-087	Unsupported partition type.
DI-088	Unsupported partition type.
DI-095	Beyond scope of err simulator.
DI-096	Beyond scope of err simulator.
DI-102	Unsupported partition type.
DI-103	Unsupported partition type.
DI-104	Case deleted, unsupported partition type.
DI-105	Case deleted, unsupported partition type.
DI-106	Case deleted.
DI-107	Case deleted.
DI-110	Unsupported partition type.
DI-111	Unsupported partition type.
DI-112	Unsupported partition type.
DI-113	Unsupported partition type.

Case	Reason Case Not Used
DI-114	Beyond scope of err simulator.
DI-115	Beyond scope of err simulator.
DI-116	Unsupported partition type.
DI-117	Unsupported partition type.
DI-124	Beyond scope of err simulator.
DI-125	Beyond scope of err simulator.
DI-131	Unsupported partition type.
DI-132	Unsupported partition type.
DI-133	Case deleted.
DI-134	Case deleted.
DI-135	Case deleted, unsupported partition type.
DI-136	Case deleted, unsupported partition type.
DI-143	Beyond scope of err simulator.
DI-144	Beyond scope of err simulator.
DI-165	Case deleted.
DI-166	Case deleted.
DI-167	Case deleted.
DI-168	Case deleted.

4.   Test Results by Assertion

This section presents the results of SafeBack testing with results grouped by assertion. The assertions are taken from the *Disk Imaging Tool Specification*, *Version 3.1.6*.

4.1 Mandatory Assertions

AM-1.   If a source is accessed by the tool, then the source will not be altered.

After each source disk is created, a SHA-1 hash value is calculated and saved. Each time the tool is run, another SHA-1 hash value is calculated after the run and compared to the saved value. For all test cases that were run, the hash codes matched (i.e. the source was not altered).

The column labeled **Case** is the test case ID. **Before SHA-1** is the first four and last four digits (in hexadecimal) of the SHA computed on the source disk before running any test cases. **After SHA-1** is the first four and last four digits (in hexadecimal) of the SHA computed on the source disk after executing SafeBack for the given test case. The **SHA Values Match?** column indicates whether the full hash values match.

Case	Before SHA-1	After SHA-1	SHA Values Match?
DI-001	BD41 ... 9A00	BD41 ... 9A00	OK
DI-002	BD41 ... 9A00	BD41 ... 9A00	OK
DI-003	D0FC ... 428F	D0FC ... 428F	OK
DI-004	BD41 ... 9A00	BD41 ... 9A00	OK
DI-005	D0FC ... 428F	D0FC ... 428F	OK
DI-006	D0FC ... 428F	D0FC ... 428F	OK
DI-007	D0FC ... 428F	D0FC ... 428F	OK
DI-008	D0FC ... 428F	D0FC ... 428F	OK
DI-009	95C6 ... 26E6	95C6 ... 26E6	OK

Case	Before SHA-1	After SHA-1	SHA Values Match?
DI-010	BD41 ... 9A00	BD41 ... 9A00	OK
DI-014	BD41 ... 9A00	BD41 ... 9A00	OK
DI-015	3E7E ... C05A	3E7E ... C05A	OK
DI-016	D0FC ... 428F	D0FC ... 428F	OK
DI-017	3E7E ... C05A	3E7E ... C05A	OK
DI-018	9AE1 ... F071	9AE1 ... F071	OK
DI-019	9AE1 ... F071	9AE1 ... F071	OK
DI-020	9AE1 ... F071	9AE1 ... F071	OK
DI-021	9AE1 ... F071	9AE1 ... F071	OK
DI-022	9AE1 ... F071	9AE1 ... F071	OK
DI-023	83A0 ... 2A54	83A0 ... 2A54	OK
DI-024	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-025	3E7E ... C05A	3E7E ... C05A	OK
DI-027	3DE5 ... FD14	3DE5 ... FD14	OK
DI-030	3E7E ... C05A	3E7E ... C05A	OK
DI-031	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-032	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-033	4692 ... 93F0	4692 ... 93F0	OK
DI-034	4692 ... 93F0	4692 ... 93F0	OK
DI-035	4692 ... 93F0	4692 ... 93F0	OK
DI-036	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-040	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-041	25BF ... 9CBF	25BF ... 9CBF	OK
DI-044	BD41 ... 9A00	BD41 ... 9A00	OK
DI-045	BD41 ... 9A00	BD41 ... 9A00	OK
DI-046	D0FC ... 428F	D0FC ... 428F	OK
DI-047	BD41 ... 9A00	BD41 ... 9A00	OK
DI-048	9AE1 ... F071	9AE1 ... F071	OK
DI-049	83A0 ... 2A54	83A0 ... 2A54	OK
DI-050	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-051	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-054	4692 ... 93F0	4692 ... 93F0	OK
DI-055	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-056	9AE1 ... F071	9AE1 ... F071	OK
DI-057	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-058	83A0 ... 2A54	83A0 ... 2A54	OK
DI-059	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-060	25BF ... 9CBF	25BF ... 9CBF	OK
DI-061	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-062	27E3 ... 3191	27E3 ... 3191	OK
DI-063	BD41 ... 9A00	BD41 ... 9A00	OK
DI-064	D0FC ... 428F	D0FC ... 428F	OK
DI-065	BD41 ... 9A00	BD41 ... 9A00	OK
DI-066	D0FC ... 428F	D0FC ... 428F	OK
DI-067	D0FC ... 428F	D0FC ... 428F	OK
DI-068	BD41 ... 9A00	BD41 ... 9A00	OK
DI-069	D0FC ... 428F	D0FC ... 428F	OK
DI-070	D0FC ... 428F	D0FC ... 428F	OK
DI-071	BD41 ... 9A00	BD41 ... 9A00	OK
DI-072	3E7E ... C05A	3E7E ... C05A	OK
DI-081	3E7E ... C05A	3E7E ... C05A	OK
DI-082	27E3 ... 3191	27E3 ... 3191	OK
DI-083	3E7E ... C05A	3E7E ... C05A	OK

Case	Before SHA-1	After SHA-1	SHA Values Match?
DI-089	3E7E ... C05A	3E7E ... C05A	OK
DI-090	D0FC ... 428F	D0FC ... 428F	OK
DI-091	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-092	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-093	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-094	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-097	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-098	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-099	8034 ... B235	8034 ... B235	OK
DI-100	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-101	3E7E ... C05A	3E7E ... C05A	OK
DI-108	3DE5 ... FD14	3DE5 ... FD14	OK
DI-109	83A0 ... 2A54	83A0 ... 2A54	OK
DI-118	3E7E ... C05A	3E7E ... C05A	OK
DI-119	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-120	25BF ... 9CBF	25BF ... 9CBF	OK
DI-121	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-122	25BF ... 9CBF	25BF ... 9CBF	OK
DI-123	25BF ... 9CBF	25BF ... 9CBF	OK
DI-126	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-127	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-128	25BF ... 9CBF	25BF ... 9CBF	OK
DI-129	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-130	2EB2 ... 2564	2EB2 ... 2564	OK
DI-137	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-138	25BF ... 9CBF	25BF ... 9CBF	OK
DI-139	25BF ... 9CBF	25BF ... 9CBF	OK
DI-140	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-141	2EB2 ... 2564	2EB2 ... 2564	OK
DI-142	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-145	4D63 ... 63FC	4D63 ... 63FC	OK
DI-146	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-147	2EB2 ... 2564	2EB2 ... 2564	OK
DI-148	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-149	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-150	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-151	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-152	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-153	8034 ... B235	8034 ... B235	OK
DI-154	25BF ... 9CBF	25BF ... 9CBF	OK
DI-155	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-156	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-157	25BF ... 9CBF	25BF ... 9CBF	OK
DI-158	25BF ... 9CBF	25BF ... 9CBF	OK
DI-159	3E7E ... C05A	3E7E ... C05A	OK
DI-160	F8C6 ... 6FF2	F8C6 ... 6FF2	OK
DI-161	8034 ... B235	8034 ... B235	OK
DI-162	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-163	0F9D ... 7AB0	0F9D ... 7AB0	OK
DI-164	25BF ... 9CBF	25BF ... 9CBF	OK

AM-2.   If there are no errors reading from a source or writing to a destination, then a bit-stream duplicate of the source will be created on the destination.

The column labeled **Case** is the test case ID. The type of object copied—disk or partition—is indicated in the **Obj** column. The column labeled **Src** is the number of sectors on the source to be copied. The column labeled **Dst** is the number of sectors on the destination. The number of sectors compared are listed in the **Compared** column. **Not Matched** indicates the number of sectors that were expected to compare equal but were different. The table is sorted first by type of object copied and then by case.

The BIOS anomaly is apparent (a value of 1,008 in the **Not Matched** column) for test cases DI-007 and DI-069. The FAT32 anomaly is apparent as a value of 1 in the **Not Matched** column for the FAT32 test cases.

Case	Obj	Src	Dst	Compared	Not Matched
DI-001	Disk	3173184	12672450	3173184	0
DI-002	Disk	3173184	6306048	3173184	0
DI-007	Disk	3335472	3335472	3335472	1008
DI-008	Disk	3335472	3173184	3173184	0
DI-009	FAT12	16065	20097	16065	0
DI-010	FAT16	1229697	1334529	1229697	0
DI-016	FAT16	1229697	1229697	1229697	0
DI-017	FAT32	1229697	1128897	1128897	1
DI-018	Disk	3173184	6306048	3173184	0
DI-019	Disk	3173184	6306048	3173184	0
DI-022	Disk	3173184	3173184	3173184	0
DI-023	Disk	40188960	39102336	39102336	0
DI-024	FAT16	1229697	1334529	1229697	0
DI-025	FAT32	1229697	1334529	1229697	1
DI-030	FAT32	1229697	1128897	1128897	1
DI-031	Disk	17938985	35843670	17938985	0
DI-032	Disk	17938985	35843670	17938985	0
DI-035	Disk	17921835	17921835	17921835	0
DI-036	Disk	17938985	17921835	17921835	0
DI-044	Disk	3173184	12672450	3173184	0
DI-045	Disk	3173184	3335472	3173184	0
DI-048	Disk	3173184	3173184	3173184	0
DI-049	Disk	40188960	39102336	39102336	0
DI-050	Disk	17938985	35843670	17938985	0
DI-051	Disk	17938985	35843670	17938985	0
DI-054	Disk	17921835	17921835	17921835	0
DI-055	Disk	17938985	17921835	17921835	0
DI-056	Disk	3173184	17921835	3173184	0
DI-057	Disk	3173184	17921835	3173184	0
DI-058	Disk	40188960	17921835	17921835	0
DI-059	Disk	17938985	39102336	17938985	0
DI-060	Disk	17938985	39102336	17938985	0
DI-061	Disk	17938985	6306048	6306048	0
DI-063	Disk	3173184	3335472	3173184	0
DI-069	Disk	3335472	3335472	3335472	1008
DI-070	Disk	3335472	3173184	3173184	0
DI-072	FAT32	1229697	1334529	1229697	1

Case	Obj	Src	Dst	Compared	Not Matched
DI-089	FAT32	1229697	1128897	1128897	1
DI-090	FAT16	1229697	1128897	1128897	0
DI-092	Disk	3173184	6306048	3173184	0
DI-098	Disk	3173184	3173184	3173184	0
DI-099	Disk	40188960	39102336	39102336	0
DI-101	FAT32	1229697	1334529	1229697	1
DI-118	FAT32	1229697	1128897	1128897	1
DI-119	FAT16	1229697	1128897	1128897	0
DI-121	Disk	17938985	35843670	17938985	0
DI-127	Disk	17938985	17938985	17938985	0
DI-128	Disk	17938985	17921835	17921835	0
DI-130	FAT32	1236942	1333332	1236942	1
DI-142	FAT16	1236942	1236942	1236942	0
DI-146	FAT16	1236942	1236942	1236942	0
DI-147	FAT32	1236942	1140552	1140552	1
DI-148	FAT16	1236942	1128897	1128897	0
DI-150	Disk	3173184	6306048	3173184	0
DI-152	Disk	3173184	3173184	3173184	0
DI-153	Disk	40188960	39102336	39102336	0
DI-155	Disk	17938985	35843670	17938985	0
DI-157	Disk	17938985	17938985	17938985	0
DI-158	Disk	17938985	17921835	17921835	0
DI-160	Disk	3173184	16434495	3173184	0
DI-161	Disk	40188960	17921835	17921835	0
DI-163	Disk	17938985	39102336	17938985	0
DI-164	Disk	17938985	6306048	6306048	0

AM-3.   If there are errors reading from a source or writing to a destination, then a qualified bit-stream duplicate of the source will be created on the destination. The identified areas are replaced by values specified by the tool's documentation.

The column labeled **Case** is the test case ID. The type of object copied is indicated in the **Obj** column. The type of error introduced is indicated in the **Err** column. **Not Matched** indicates the number of sectors that were expected to compare equal but were different. The **Range** column contains a list of sector ranges indicating contiguous blocks of sectors that do not match the expected results.

The BIOS anomaly is indicated in cases DI-005, DI-006, DI-062, DI-066, DI-064, and DI-066. The FAT32 anomaly is apparent, as a range of 1, is listed with another range in the **Range** column. The entries in the **Err** column indicate the type of error introduced: src rd (source read), dst wt (destination write), img rd (image read), img wt (image write), and corrupt (the image file has been changed).

Case	Obj	Err	Not Matched	Range
DI-005	Disk	src rd	1009	36460, 3334464-3335471
DI-006	Disk	dst wt	1076	36227-36294, 3334464-3335471
DI-014	FAT16	src rd	1	24864
DI-015	FAT32	dst wt	89	1, 1697-1784
DI-020	Disk	src rd	1	8929
DI-021	Disk	dst wt	105	7392-7496

Case	Obj	Err	Not Matched	Range
DI-027	FAT32	src rd	2	1, 369635
DI-033	Disk	src rd	1	699
DI-034	Disk	dst wt	29	90-118
DI-040	FAT16	src rd	1	1060362
DI-041	FAT32	dst wt	109	1, 514210-514317
DI-062	Disk	corrupt	1009	17, 3334464-3335471
DI-064	Disk	src rd	1009	20346, 3334464-3335471
DI-065	Disk	dst wt	91	20734-20824
DI-066	Disk	img rd	1127	20111-20229, 3334464-3335471
DI-067	Disk	img wt	3297987	37485-3335471
DI-068	Disk	corrupt	1	18
DI-071	FAT16	corrupt	1	11
DI-081	FAT32	img rd	120	1, 30821-30939
DI-082	FAT16	img wt	1152466	77231-1229696
DI-083	FAT32	corrupt	2	1, 10
DI-091	Disk	corrupt	1	4
DI-093	Disk	src rd	1	7895
DI-094	Disk	dst wt	45	6381-6425
DI-097	Disk	corrupt	1	4
DI-100	FAT16	corrupt	1	0
DI-108	FAT32	src rd	2	1, 434263
DI-109	FAT16	dst wt	11	530217, 530235-530240, 530245-530247,
DI-120	Disk	corrupt	1	11
DI-122	Disk	src rd	1	1380770
DI-123	Disk	dst wt	93	17938800-17938892
DI-126	Disk	corrupt	1	15
DI-129	FAT16	corrupt	1	0
DI-137	FAT16	src rd	1	481953
DI-138	FAT32	dst wt	21	1, 370903-370922
DI-139	FAT32	img rd	120	1, 68068-68186
DI-140	FAT16	img wt	1024051	212891-1236941
DI-141	FAT32	corrupt	2	1, 7
DI-145	FAT32	corrupt	2	1, 1450
DI-149	Disk	corrupt	1	12
DI-151	Disk	corrupt	1	6
DI-154	Disk	corrupt	1	12
DI-156	Disk	corrupt	1	9
DI-159	Disk	corrupt	1	1
DI-162	Disk	corrupt	1	13

AM-4.   If there are errors reading from the source or writing to the destination, then the error types and locations are logged.

The column labeled **Case** is the test case ID. The type of operation performed is indicated by the **Op** column. The type of error introduced is indicated in the **Err** column. The message from the SafeBack log file is in the **Message** column. The reported location (if any) is in the **Location** column. In the **Location** column, LBA means logical block address.

Case	Op	Err	Message	Location
DI-005	copy	src rd	sector flagged bad error (status 0a)	LBA 36460 CHS 9/2/47
DI-006	copy	dst wt	sector flagged bad error (status 0a)	LBA 36227 CHS 8/63/3
DI-014	copy	src rd	bad address mark error (status 02)	LBA 24864 CHS 6/10/43
DI-015	copy	dst wt	bad address mark error (status 02)	LBA 1697 CHS 0/26/60
DI-020	copy	src rd	sector flagged bad error (status 0a)	LBA 8929 CHS 8/13/47
DI-021	copy	dst wt	sector flagged bad error (status 0a)	LBA 7392 CHS 7/5/22
DI-027	copy	src rd	bad address mark error (status 02)	LBA 369635 CHS 23/2/15
DI-033	copy	src rd	sector flagged bad error (status 0a)	LBA 699 CHS 0/11/7
DI-034	copy	dst wt	sector flagged bad error (status 0a)	LBA 90 CHS 0/1/28
DI-040	copy	src rd	bad address mark error (status 02)	LBA 1060362 CHS 66/1/10
DI-041	copy	dst wt	bad address mark error (status 02)	LBA 514210 CHS 32/2/5
DI-064	image	src rd	sector flagged bad error (status 0a)	LBA 20346 CHS 5/2/61
DI-065	image	dst wt	sector flagged bad error (status 0a)	LBA 20734 CHS 5/9/8
DI-066	image	img rd	access denied error	
DI-067	image	img wt	unrecoverable file error	
DI-081	image	img rd	access denied error	
DI-082	image	img wt	unrecoverable file error	
DI-093	image	src rd	sector flagged bad error (status 0a)	LBA 7895 CHS 7/13/21
DI-094	image	dst wt	sector flagged bad error (status 0a)	LBA 6381 CHS 6/5/19
DI-108	image	src rd	bad address mark error (status 02)	LBA 434263 CHS 27/8/5
DI-109	image	dst wt	bad address mark error (status 02)	LBA 530217 CHS 33/1/10
DI-122	image	src rd	sector flagged bad error (status 0a)	LBA 1380770 CHS 85/241/63
DI-123	image	dst wt	sector flagged bad error (status 0a)	LBA 17938800 CHS 1116/162/55
DI-137	image	src rd	bad address mark error (status 02)	LBA 481953 CHS 30/0/4
DI-138	image	dst wt	bad address mark error (status 02)	LBA 370903 CHS 23/22/23
DI-139	image	img rd	access denied error	
DI-140	image	img wt	unrecoverable file error	

AM-5.   If the source or destination is an IDE or SCSI drive and an image or bit-stream duplicate is created, then the interface used is presumed to be *well defined*.[3]

The column labeled **Case** is the test case ID. The column labeled **Src** is the interface for accessing the source. The column labeled **Dst** is the interface for accessing the destination.

Case	Src	Dst
DI-001	BIOS-IDE	BIOS-IDE
DI-002	BIOS-IDE	BIOS-IDE
DI-003	BIOS-IDE	BIOS-IDE
DI-004	BIOS-IDE	BIOS-IDE
DI-005	BIOS-IDE	BIOS-IDE
DI-006	BIOS-IDE	BIOS-IDE
DI-007	BIOS-IDE	BIOS-IDE
DI-008	BIOS-IDE	BIOS-IDE
DI-009	BIOS-IDE	BIOS-IDE
DI-010	BIOS-IDE	BIOS-IDE
DI-014	BIOS-IDE	BIOS-IDE
DI-015	BIOS-IDE	BIOS-IDE
DI-016	BIOS-IDE	BIOS-IDE
DI-017	BIOS-IDE	BIOS-IDE
DI-018	XBIOS-IDE	XBIOS-IDE
DI-019	XBIOS-IDE	XBIOS-IDE
DI-020	XBIOS-IDE	XBIOS-IDE
DI-021	XBIOS-IDE	XBIOS-IDE
DI-022	XBIOS-IDE	XBIOS-IDE
DI-023	XBIOS-IDE	XBIOS-IDE
DI-024	XBIOS-IDE	XBIOS-IDE
DI-025	XBIOS-IDE	XBIOS-IDE
DI-027	XBIOS-IDE	XBIOS-IDE
DI-030	XBIOS-IDE	XBIOS-IDE
DI-031	XBIOS-SCSI	XBIOS-SCSI
DI-032	XBIOS-SCSI	XBIOS-SCSI
DI-033	XBIOS-SCSI	XBIOS-SCSI
DI-034	XBIOS-SCSI	XBIOS-SCSI
DI-035	XBIOS-SCSI	XBIOS-SCSI
DI-036	XBIOS-SCSI	XBIOS-SCSI
DI-040	XBIOS-SCSI	XBIOS-SCSI
DI-041	XBIOS-SCSI	XBIOS-SCSI
DI-044	DIRECT-IDE	DIRECT-IDE
DI-045	DIRECT-IDE	DIRECT-IDE
DI-046	DIRECT-IDE	DIRECT-IDE
DI-047	DIRECT-IDE	DIRECT-IDE
DI-048	DIRECT-IDE	DIRECT-IDE
DI-049	DIRECT-IDE	DIRECT-IDE
DI-050	ASPI	ASPI
DI-051	ASPI	ASPI
DI-054	ASPI	ASPI
DI-055	ASPI	ASPI
DI-056	XBIOS-IDE	XBIOS-SCSI

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[3] The actual assertion from the specification refers to a specific requirement. The essence of the referenced requirement is for the interface to be well defined.

Case	Src	Dst
DI-057	XBIOS-IDE	XBIOS-SCSI
DI-058	XBIOS-IDE	XBIOS-SCSI
DI-059	XBIOS-SCSI	XBIOS-IDE
DI-060	XBIOS-SCSI	XBIOS-IDE
DI-061	XBIOS-SCSI	XBIOS-IDE
DI-062	BIOS-IDE	BIOS-IDE
DI-063	BIOS-IDE	BIOS-IDE
DI-064	BIOS-IDE	BIOS-IDE
DI-065	BIOS-IDE	BIOS-IDE
DI-066	BIOS-IDE	BIOS-IDE
DI-067	BIOS-IDE	BIOS-IDE
DI-068	BIOS-IDE	BIOS-IDE
DI-069	BIOS-IDE	BIOS-IDE
DI-070	BIOS-IDE	BIOS-IDE
DI-071	BIOS-IDE	BIOS-IDE
DI-072	BIOS-IDE	BIOS-IDE
DI-081	BIOS-IDE	BIOS-IDE
DI-082	BIOS-IDE	BIOS-IDE
DI-083	BIOS-IDE	BIOS-IDE
DI-089	BIOS-IDE	BIOS-IDE
DI-090	BIOS-IDE	BIOS-IDE
DI-091	XBIOS-IDE	XBIOS-IDE
DI-092	XBIOS-IDE	XBIOS-IDE
DI-093	XBIOS-IDE	XBIOS-IDE
DI-094	XBIOS-IDE	XBIOS-IDE
DI-097	XBIOS-IDE	XBIOS-IDE
DI-098	XBIOS-IDE	XBIOS-IDE
DI-099	XBIOS-IDE	XBIOS-IDE
DI-100	XBIOS-IDE	XBIOS-IDE
DI-101	XBIOS-IDE	XBIOS-IDE
DI-108	XBIOS-IDE	XBIOS-IDE
DI-109	XBIOS-IDE	XBIOS-IDE
DI-118	XBIOS-IDE	XBIOS-IDE
DI-119	XBIOS-IDE	XBIOS-IDE
DI-120	XBIOS-SCSI	XBIOS-SCSI
DI-121	XBIOS-SCSI	XBIOS-SCSI
DI-122	XBIOS-SCSI	XBIOS-SCSI
DI-123	XBIOS-SCSI	XBIOS-SCSI
DI-126	XBIOS-SCSI	XBIOS-SCSI
DI-127	XBIOS-SCSI	XBIOS-SCSI
DI-128	XBIOS-SCSI	XBIOS-SCSI
DI-129	XBIOS-SCSI	XBIOS-SCSI
DI-130	XBIOS-SCSI	XBIOS-SCSI
DI-137	XBIOS-SCSI	XBIOS-SCSI
DI-138	XBIOS-SCSI	XBIOS-SCSI
DI-139	XBIOS-SCSI	XBIOS-SCSI
DI-140	XBIOS-SCSI	XBIOS-SCSI
DI-141	XBIOS-SCSI	XBIOS-SCSI
DI-142	XBIOS-SCSI	XBIOS-SCSI
DI-145	XBIOS-SCSI	XBIOS-SCSI
DI-146	XBIOS-SCSI	XBIOS-SCSI
DI-147	XBIOS-SCSI	XBIOS-SCSI
DI-148	XBIOS-SCSI	XBIOS-SCSI

Case	Src	Dst
DI-149	DIRECT-IDE	DIRECT-IDE
DI-150	DIRECT-IDE	DIRECT-IDE
DI-151	DIRECT-IDE	DIRECT-IDE
DI-152	DIRECT-IDE	DIRECT-IDE
DI-153	DIRECT-IDE	DIRECT-IDE
DI-154	ASPI	ASPI
DI-155	ASPI	ASPI
DI-156	ASPI	ASPI
DI-157	ASPI	ASPI
DI-158	ASPI	ASPI
DI-159	XBIOS-IDE	XBIOS-SCSI
DI-160	XBIOS-IDE	XBIOS-SCSI
DI-161	XBIOS-IDE	XBIOS-SCSI
DI-162	XBIOS-SCSI	XBIOS-IDE
DI-163	XBIOS-SCSI	XBIOS-IDE
DI-164	XBIOS-SCSI	XBIOS-IDE

AM-6.   If the expected result of any test defined in this specification is achieved and the documentation was followed without change in achieving this result, then the documentation is presumed correct.

Some behavior of the tool was not well documented or was ambiguous. For example, the description of the tool treatment of extra sectors on a copy of an original was ambiguous (see section 2.2).

AM-7.   If a bit-stream duplicate of a source is created on a larger destination, then the contents of areas on the destination that are not part of the duplicate are set to values as specified in the tool documentation.

The column labeled **Case** is the test case ID. The type of object copied is indicated in the **Obj** column. The **Do BF** column indicates the SafeBack backfill setting recorded in the log file. A value of *Yes* indicates that zero backfilling should be performed. The **Excess** column indicates the number of excess sectors on the destination. The number of excess sectors backfilled with zero is indicated in the **Zero BF** column. The number of excess destination sectors that were not changed by SafeBack is indicated in the **Not BF** column.

The backfill anomaly is apparent in a large number of cases. The BIOS anomaly is indicated in cases DI-001 and DI-063.

Case	Obj	Do BF	Excess	Zero BF	Not BF
DI-001	Disk	No	9499266	9486036	13230
DI-002	Disk	Yes	3132864	3132864	0
DI-009	FAT12	No	4032	0	4032
DI-010	FAT16	Yes	104832	0	104832
DI-018	Disk	No	3132864	3132864	0
DI-019	Disk	Yes	3132864	3132864	0
DI-024	FAT16	No	104832	0	104832
DI-025	FAT32	Yes	104832	0	104832
DI-031	Disk	No	17904685	17904685	0

Case	Obj	Do BF	Excess	Zero BF	Not BF
DI-032	Disk	Yes	17904685	17904685	0
DI-044	Disk	No	9499266	9499266	0
DI-045	Disk	Yes	162288	162288	0
DI-050	Disk	No	17904685	17904685	0
DI-051	Disk	Yes	17904685	17904685	0
DI-056	Disk	No	14748651	14748651	0
DI-057	Disk	Yes	14748651	14748651	0
DI-059	Disk	No	21163351	21163351	0
DI-060	Disk	Yes	21163351	21163351	0
DI-062	Disk	No	2970576	2970576	0
DI-063	Disk	No	162288	161280	1008
DI-071	FAT16	No	104832	0	104832
DI-072	FAT32	No	104832	0	104832
DI-091	Disk	No	3132864	3132864	0
DI-092	Disk	No	3132864	3132864	0
DI-100	FAT16	No	104832	0	104832
DI-101	FAT32	No	104832	0	104832
DI-120	Disk	No	17904685	17904685	0
DI-121	Disk	No	17904685	17904685	0
DI-129	FAT16	No	96390	0	96390
DI-130	FAT32	No	96390	0	96390
DI-149	Disk	No	3132864	3132864	0
DI-150	Disk	No	3132864	3132864	0
DI-154	Disk	No	17904685	17904685	0
DI-155	Disk	No	17904685	17904685	0
DI-159	Disk	No	32508198	32508198	0
DI-160	Disk	No	13261311	13261311	0
DI-162	Disk	No	21163351	21163351	0
DI-163	Disk	No	21163351	21163351	0

AM-8.   If a bit-stream duplicate of a source is created on a smaller destination, then the duplicate is qualified by omitted portions of the bit-stream, and the tool will notify the user that the source is larger than the destination.

The column labeled **Case** is the test case ID. The column labeled **Op** indicates the type of operation selected. The type of object copied is indicated in the **Obj** column. The message from the log file is in the **Message** column.

Case	Op	Obj	Message
DI-008	copy	Disk	Insufficient destination file space projected.
DI-017	copy	FAT32	Insufficient destination file space projected.
DI-023	copy	Disk	Insufficient destination file space projected.
DI-030	copy	FAT32	Insufficient destination file space projected.
DI-036	copy	Disk	Insufficient destination file space projected.
DI-049	copy	Disk	Insufficient destination file space projected.
DI-055	copy	Disk	Insufficient destination file space

Case	Op	Obj	Message
			projected.
DI-058	copy	Disk	Insufficient destination file space projected.
DI-061	copy	Disk	Insufficient destination file space projected.
DI-070	image	Disk	Destination drive capacity is smaller.
DI-089	image	FAT32	Destination drive capacity is smaller.
DI-090	image-rm	FAT16	Destination drive capacity is smaller.
DI-099	image	Disk	Destination drive capacity is smaller.
DI-118	image	FAT32	Destination drive capacity is smaller.
DI-119	image-rm	FAT16	Destination drive capacity is smaller.
DI-128	image	Disk	Destination drive capacity is smaller.
DI-147	image	FAT32	Destination drive capacity is smaller.
DI-148	image-rm	FAT16	Destination drive capacity is smaller.
DI-153	image	Disk	Destination drive capacity is smaller.
DI-158	image	Disk	Destination drive capacity is smaller.
DI-161	image	Disk	Destination drive capacity is smaller.
DI-164	image	Disk	Destination drive capacity is smaller.

4.2   Optional Assertions

AO-1.   If a hash of one or more blocks (i.e., less than the entire disk) from the source is computed before duplication and is compared to a hash of the same blocks from the destination, the hashes will compare equal.

The column labeled **Case** is the test case ID. The type of operation is indicated in the **Op** column. The type of object copied is indicated in the **Obj** column. The type of error introduced is indicated in the **Err** column. The message from the log file is in the **Message** column.

An error message of CRC mismatch is the expected result for cases with "corrupt," "img rd," or "img wt" listed in the **Err** column.

Case	Obj	Err	Message
DI-062	Disk	corrupt	CRC mismatch: Calc: e8b30a50, Read: 77b22116
DI-063	Disk	none	CRC verifies: c47d6f53
DI-064	Disk	src rd	CRC verifies: b2ce8cc4
DI-065	Disk	dst wt	CRC verifies: e4110b05
DI-066	Disk	img rd	CRC mismatch: Calc: e4ced409, Read: 66550957
DI-068	Disk	corrupt	CRC mismatch: Calc: f68b0bae, Read: 5d3cb32a
DI-069	Disk	none	CRC verifies: a56cb1bc
DI-071	FAT16	corrupt	CRC mismatch: Calc: 0a622327, Read: 7a50bbc4
DI-072	FAT32	none	CRC verifies: bd824e5c
DI-081	FAT32	img rd	CRC mismatch: Calc: 8b9ec084, Read: ce17ce49
DI-083	FAT32	corrupt	CRC mismatch: Calc: 43c7bebf, Read: ddcc46b0
DI-091	Disk	corrupt	CRC mismatch: Calc: 04627298, Read: 4f437945
DI-092	Disk	none	CRC verifies: a3a50a2a
DI-093	Disk	src rd	CRC verifies: 91056b0f
DI-094	Disk	dst wt	CRC verifies: 4cdfe8f9
DI-097	Disk	corrupt	CRC mismatch: Calc: 4321c445, Read: 3a1d33b9
DI-098	Disk	none	CRC verifies: 760cf5e2
DI-100	FAT16	corrupt	CRC mismatch: Calc: 45c4af2b, Read: 91255045

Case	Obj	Err	Message
DI-101	FAT32	none	CRC verifies: bd08777b
DI-108	FAT32	src rd	CRC verifies: 591da57a
DI-109	FAT16	dst wt	CRC verifies: 5f9fda26
DI-120	Disk	corrupt	CRC mismatch: Calc: 1b535c9a, Read: e5e77797
DI-121	Disk	none	CRC verifies: d3887c3f
DI-122	Disk	src rd	CRC verifies: aec0b453
DI-123	Disk	dst wt	CRC verifies: 471e534b
DI-126	Disk	corrupt	CRC mismatch: Calc: 1e24a621, Read: 58a8f1e3
DI-127	Disk	none	CRC verifies: 6fa0ad4f
DI-129	FAT16	corrupt	CRC mismatch: Calc: 1be33940, Read: 361e1960
DI-130	FAT32	none	CRC verifies: 4b1656d4
DI-137	FAT16	src rd	CRC verifies: 9cf5032d
DI-138	FAT32	dst wt	CRC verifies: b4ff226a
DI-139	FAT32	img rd	CRC mismatch: Calc: 23d8afa0, Read: 23b4b171
DI-141	FAT32	corrupt	CRC mismatch: Calc: b391cfbb, Read: 4634c6f8
DI-142	FAT16	none	CRC verifies: d88c8e2f
DI-145	FAT32	corrupt	CRC mismatch: Calc: ecaaf057, Read: 68796db1
DI-146	FAT16	none	CRC verifies: a350e79a
DI-149	Disk	corrupt	CRC mismatch: Calc: 37014d2e, Read: 2de48036
DI-150	Disk	none	CRC verifies: 479afba8
DI-151	Disk	corrupt	CRC mismatch: Calc: e9ad5545, Read: 24d2ac4f
DI-152	Disk	none	CRC verifies: 5c9fb4c1
DI-154	Disk	corrupt	CRC mismatch: Calc: 7ad426b7, Read: bcbf2826
DI-155	Disk	none	CRC verifies: 921cbf7e
DI-156	Disk	corrupt	CRC mismatch: Calc: d93406b9, Read: 99be1833
DI-159	Disk	corrupt	CRC mismatch: Calc: 5a8e4fad, Read: a5863044
DI-160	Disk	none	CRC verifies: b4fc3848
DI-162	Disk	corrupt	CRC mismatch: Calc: efe8f293, Read: f7c78030
DI-163	Disk	none	CRC verifies: 463ad0b1

AO-2.   If more than one partition exists on the source disk, the tool will produce a duplicate of any user-selected source partition on the destination.

Safeback does not support partition copies of NTFS or Linux partitions. FAT16 partitions were copied correctly. FAT32 partitions were not copied exactly. Two fields (a total of 8 bytes) in sector 1 of the partition were modified. The fields contained file system control information. No data file content was affected by the change.

Results for the partition test cases are listed in the mandatory assertions section: DI-010, DI-014, DI-015, DI-016, DI-017, DI-024, DI-027, DI-030, DI-040, DI-041, DI-071, DI-072, DI-081, DI-082, DI-083, DI-089, DI-090, DI-100, DI-101, DI-108, DI-109, DI-118, DI-119, DI-129, DI-130, DI-137, DI-138, DI-139, DI-140, DI-142, DI-145, DI-146, DI-147, and DI-148.

AO-3.   If a partition exists on the source, the tool will display or log a message indicating that the partition exists and display or log one or more items of information from the following list: drive indicator, device type, device address or mount point, size, space used, and free space.

No anomalies were observed.

AO-4. **If the tool logs the tool version, it will be the version referred to in the implementation's documentation.**

No anomalies were observed.

AO-5. **If the subject disk identification is available and the tool is capable of logging the subject disk identification, then the subject disk identification will be logged.**

No anomalies were observed.

AO-6. **If the tool logs the source partition table in human readable form and the information from the source partition table can be ascertained independently from the tool, then the source partition table information will accurately match the content of the independent partition table information.**

No anomalies were observed.

AO-7. **If the tool logs errors and any error occurs, then the type and location of the error will be logged.**

See AM-4.

AO-8. **If the tool logs tool actions and the tool's documentation states what actions are logged, then the actions logged will accurately match those documented in the tool's documentation.**

No anomalies were observed.

AO-9. **If the tool logs start and finish run times, then the logged start and finish run times will accurately match those recorded by the tester according to screen input images, test input scripts, or tester notes.**

No anomalies were observed.

AO-10. **If the tool logs tool settings and the tool's documentation states what settings are logged, then the logged settings will accurately match those set by the tester or as documented in the tool's documentation.**

No anomalies were observed.

AO-11. **If the tool logs user comments, then the logged user comments will accurately match those entered by the tester as captured in screen input images, test input scripts, or tester notes.**

No anomalies were observed.

AO-12.   **If the tool creates image files, then it will create an image file of a source on a magnetic medium that can be removed from the platform on which it was created.**

The results for image files are included in the results for the mandatory assertions and optional assertion AO-1. Removable medium test cases are DI-090, DI-119, DI-145, DI-146, and DI-148.

AO-13.   **If the tool creates an image file from a source on a removable magnetic medium, then a duplicate of the source created from the removable magnetic medium will result in a duplicate on the destination, and the destination will compare equal to the source.**

The results for image files are included in the results for the mandatory assertions and optional assertion AO-1. Removable medium test cases are DI-090, DI-119, DI-145, DI-146, and DI-148.

AO-14.   **If an image file is created, and there are no errors reading from a source, nor errors writing to a destination, then a bit-stream duplicate created from the image file will compare equal to the source.**

The results for image files are included in the results for the mandatory assertions and optional assertion AO-1. Image test cases are DI-062, DI-063, DI-068, DI-069, DI-070, DI-071, DI-072, DI-076, DI-083, DI-089, DI-090, DI-091, DI-092, DI-097, DI-098, DI-099, DI-100, DI-101, DI-118, DI-119, DI-120, DI-121, DI-126, DI-127, DI-128, DI-129, DI-130, DI-139, DI-141, DI-142, DI-145, DI-146, DI-150, DI-151, DI-152, DI-153, DI-154, DI-155, DI-156, DI-157, DI-158, DI-159, DI-160, DI-161, DI-162, DI-163, and DI-164.

5.   Testing Environment

The tests were run using eleven host computers: Beta1, Beta3, Beta4, Beta6, Beta7, Delta1, Marple, Cadfael, Rumpole, Wimsey, and JudgeDee. More than 40 hard drives (14 different models, 6 different brands) were used for the tests (Table 5-1). The tests were run with the hard drives arranged in one of 12 possible configurations (Table 5-3) as required by the test parameters.

5.1 Extended BIOS Host Computers

Four host computers (Cadfael, Rumpole, Wimsey, and JudgeDee) have the following hardware components in common:

Table 5-1. Extended BIOS Host Computer Hardware Components

ASUS CUSL2 Motherboard
BIOS: Award Medallion v6.0
Intel Pentium III (Coppermine) 933Mhz
512,672k Memory
Adaptec 29160N SCSI Adapter card
Plextor CR-RW PX-W124TS Rev: 1.06
Iomega 2GB Jaz drive Rev: E.17
LS-120 Super floppy
Two slots for removable IDE hard disk drives
Two slots for removable SCSI hard disk drive

Rumpole also had a 30GB OnStream SC30 tape drive (not used in the test procedures). JudgeDee had a third slot for a removable IDE hard disk drive.

5.2   Legacy BIOS Host Computers

Beta1, Beta3, Beta4, Beta6, and Beta7 are Nexar 166MHz computers with 256MB RAM; two hard disk drive bays, both of which take hard drives mounted in removable carriages; a CD–ROM drive; a 1.44MB floppy drive; and a 17" color monitor. The usual operating system environment is PC-DOS 6.3, booted from the floppy drive. The motherboard is a HCL Hewlett-Packard Integrated ISA/PCI P54C with an Award v4.51PG BIOS. Beta7 also has an Adaptec 29160N SCSI Adapter card with an Iomega 2GB Jaz drive Rev: E.17 attached.

5.3   Special SCSI System

Marple is a Nexar 166MHz computer with 256MB RAM, two SCSI hard disks (C0 and C1), a CD–ROM drive, a 1.44MB floppy drive, and a 17" color monitor. The SCSI adapter is the Adaptec AHA-2940UW Pro with SCSI BIOS V2.11.0. The usual operating system environment is PC-DOS 6.3, booted from the floppy drive. The BIOS is Award v4.51PG.

Marple is used on some SCSI test cases.

5.4   Fast SHA-1 for Nexar Tests

Delta1 is a Dell Computer Corporation system with 256MB RAM, one hard disk drive bay, one installed 15.37GB hard disk, a CD–ROM drive, a 1.44MB floppy drive, a 250MB ZIP drive, and a 17" color monitor. The usual operating system environment is PC-DOS 6.3, booted from the floppy drive. The BIOS is PhoenixBios 4.0 Release 6.0.

Delta1 is used to compute SHA-1 values for tests run on Nexar systems as needed. Delta1 (888Mhz) computes SHA-1 values much faster than Nexar (166Mhz) systems.

5.5   Hard Disk Drives

The hard disk drives that were used are listed in Table 5-2. These hard drives were mounted in removable storage modules. Any combination of two IDE hard drives and two SCSI hard drives

can be installed in Cadfael, Rumpole, Wimsey, and JudgeDee as required for a test. The legacy BIOS computers can have only two IDE drives mounted at a time.

The IDE disks used in the legacy BIOS computers have jumpers set manually to drive 0 for source drives and drive 1 for destination drives, and the media drive is set to either 0 or 1 depending on the available drive slot available after either the source or destination drive is installed. The IDE disks used in Cadfael, Rumpole, Wimsey, and JudgeDee have jumpers set for cable select.

The SCSI ID for the SCSI disk is set to either 0 or 1 as required by the test case. Except as noted, a source disk is set to ID 0, and a destination disk is set to ID 1.

Table 5-2. Hard Drives Used in Testing

Label	Model	Interface	Usable Sectors	Capacity (GB)
1E	QUANTUM ATLAS10K3_18_SCA	SCSI	35,916,547	18.38
63	WDCWD64AA	IDE	12,594,960	6.45
64	WDCWD64AA	IDE	12,594,960	6.45
65	WDCWD64AA	IDE	12,594,960	6.45
A1	QUANTUM SIROCCO 1700A	IDE	3,335,472	1.70
A3	QUANTUM SIROCCO 1700A	IDE	3,335,472	1.70
A4	QUANTUM SIROCCO 1700A	IDE	3,335,472	1.70
A5	WDC WD200BB-00AUA1	IDE	39,102,336	20.02
A6	WDC WD200BB-00AUA1	IDE	39,102,336	20.02
A7	WDC WD200BB-00AUA1	IDE	39,102,336	20.02
A8	WDC WD200BB-00AUA1	IDE	39,102,336	20.02
AB	MAXTOR53073H4	IDE	60,030,432	30.73
B5	WDC AC21600H	IDE	3,173,184	1.62
B6	WDC AC21600H	IDE	3,173,184	1.62
B7	WDC AC21600H	IDE	3,173,184	1.62
B8	WDC AC21600H	IDE	3,173,184	1.62
B9	WDC AC21600H	IDE	3,173,184	1.62
BA	QUANTUM FIREBALL ST3.2A	IDE	6,306,048	3.22
BB	QUANTUM FIREBALL ST3.2A	IDE	6,306,048	3.22
BC	QUANTUM FIREBALL ST3.2A	IDE	6,306,048	3.22
BD	QUANTUM FIREBALL ST3.2A	IDE	6,306,048	3.22
C0	SEAGATE ST39204LC	SCSI	17,921,835	9.17
C1	SEAGATE ST39204LC	SCSI	17,921,835	9.17
CB	SEAGATE ST336705LC	SCSI	71,687,370	36.70
CC	SEAGATE ST336705LC	SCSI	71,687,370	36.70
D3	FUJITSU MPE3064AT	IDE	12,672,450	6.48
D7	QUANTUM SIROCCO 1700A	IDE	3,335,472	1.70
DA	FUJITSU MPE3064AT	IDE	12,672,450	6.48
DB	FUJITSU MPE3064AT	IDE	12,672,450	6.48
E1	QUANTUM ATLAS10K2-TY092J	SCSI	17,938,985	9.18
E2	QUANTUM ATLAS10K2-TY092J	SCSI	17,938,985	9.18
E3	QUANTUM ATLAS10K2-TY092J	SCSI	17,938,985	9.18
E4	QUANTUM ATLAS10K2-TY092J	SCSI	17,938,985	9.18
E6	SEAGATE ST318404LC	SCSI	35,843,670	18.35
E7	SEAGATE ST318404LC	SCSI	35,843,670	18.35
E8	SEAGATE ST318404LC	SCSI	35,843,670	18.35

Label	Model	Interface	Usable Sectors	Capacity (GB)
EA	SEAGATE ST39204LC	SCSI	17,921,835	9.17
EB	SEAGATE ST39204LC	SCSI	17,921,835	9.17
EC	SEAGATE ST39204LC	SCSI	17,921,835	9.17
F1	QUANTUM SIROCCO 1700A	IDE	3,335,472	1.70
F5	IBM-DTLA-307020	IDE	40,188,960	20.57
F6	IBM-DTLA-307020	IDE	40,188,960	20.57

5.6 Test Configurations

The host computer and hard drive setup were determined by the test case parameters. Either two or three disks were required for each test case. A source and destination were required for all test cases. A media disk was required for image operations. The source disk provides something to copy. The destination disk provides a place to put the copy. The media disk provides a place to put the image file for test cases that require the creation of an image file. One of two DOS Boot floppies was selected and then used to create the run-time environment for the test case; the floppy contained control scripts and log files. Either a PC DOS 6.3 or Windows 98 DOS environment was selected. The Windows 98 DOS environment was required for test cases with an operation on a FAT32 partition. A CD–ROM contained the support software, a copy of SafeBack, and utility software. The support software provided for setup of test data, measurement of test results, and control of the test process.

The type of BIOS required for the test case determined the selection of the host computer. If an extended BIOS was required then either Cadfael, Rumpole, Wimsey, or JudgeDee was selected. If a legacy BIOS was required, then one of the Nexar computers was selected. If a copy operation on equal-sized SCSI disks was required, then Marple was selected.

The factors determining the source disk selection were the source disk interface and type of partition to copy. A disk was selected with the matching interface and a partition of the type required for the test case. The factors for the selection of the destination drive were the destination interface and the relative size parameters. A drive was selected with the specified interface and, for whole disk copies, size relative to the source. For partition copies, the actual size of the destination drive did not matter because it was the size of the partition on the destination that was relevant. After the source and destination drives were selected, the media disk was selected for one of the two available drive slots.

The 12 system hard drive configurations used for the tests are presented in Table 5-3. The **Source** column indicates where the source drive was mounted. Only the primary IDE channel was used. The drive was usually positioned as drive 0. SCSI source drives were set to SCSI ID 0. The **Destination** column indicates the positioning of the destination drive. The **Media** column indicates the positioning of the media drive.

Configurations 1–10 were used for the entire duration of a test case. Configurations 11 and 12 were used when only two disk drive slots were available on the host computer. The media disk was swapped with either the source or destination disk as required for the step of the test case execution. If an image file was to be created, then only the source and media disk were installed.

If the image was to be restored to the destination, then the source drive was replaced by the media drive. If the source was to be compared with the destination, then the media drive was not installed.

Table 5-3. System Configurations

ID	Source	Destination	Media
1	IDE primary 0	IDE primary 1	SCSI ID 0
2	SCSI ID 0	SCSI ID 1	IDE primary 0
3	IDE primary 0	IDE primary 1	Jaz
4	SCSI ID 0	IDE primary 1	IDE primary 0
5	IDE primary 0	SCSI ID 0	IDE primary 1
6	SCSI ID 0	SCSI ID 1	Jaz
7	IDE primary 0	IDE primary 1	None
8	IDE primary 0	SCSI ID 1	None
9	SCSI ID 0	IDE primary 1	None
10	SCSI ID 0	SCSI ID 1	None
11	IDE primary 0	IDE primary 1	IDE primary 1, IDE primary 0
12	SCSI ID 0	SCSI ID 1	SCSI ID 1, SCSI ID 0

5.7   Support Software

FS-TST Release 1.0 was developed to support the testing of disk imaging tools. FS-TST Release 1.0 can be obtained from *http://www.cftt.nist.gov* . The support software serves five main functions: initialization of a disk to a known value (DISKWIPE); comparison of a source with a destination (DISKCMP, PARTCMP, ADJCMP, and SECCMP); detection of changes to a disk (DISKHASH and SECHASH); corruption of an image file (CORRUPT); and simulation of a faulty disk (BADDISK and BADX13). All programs except for BADDISK and BADX13 were written in ANSI C and compiled with the Borland C++ compiler version 4.5. BADDISK and BADX13 were written in assembler language and compiled with Borland Turbo Assembler version 5.0.

For these test cases, version 3.2 of BADDISK was used, not the version 3.1 included in FS-TST 1.0. In addition to this software, one of two DOS boot floppies, either a PC DOS 6.3 or Windows 98 DOS, was used to create the run-time environment for the test case. The Windows 98 DOS boot disk was required for test cases with an operation on a FAT32 partition.

5.8   Basic Structure of Test Cases

A test case has three basic parts: setup, execution of the tool, and measurement of the results. The setup for the test case was done in the DOS environment and involved the following steps:

1. Initialize a source disk to a known value.
2. Hash the source disk and save the hash value.
3. Initialize a destination disk to a known value.
4. If the test requires a partition on the destination, then create and format a partition on the destination disk.
5. If the test uses an image file, then partition and format a media disk.

Executing the support software required for each test tool being tested was done in the DOS environment. The steps in this execution phase were:

1. If the test requires a disk I/O error, then set up disk error simulation.
2. If the test requires an image file, then use the tool to create an image file of the source on the media disk.
3. If the test requires a corrupted image file, then corrupt the image file.
4. Use the disk imaging tool to create the destination disk either from the source disk directly or by restoring an image file of the source to the destination.

Measurement of the test results has three steps:

1. Compute a hash of the source disk and compare the computed hash value with the saved hash value. If the hashes are the same, then the tool has not altered the source disk.
2. Compare the source with the destination to determine what sectors match and the disposition of any excess destination sectors.
3. Examine the tool log file for any expected messages. For example, in an I/O error test, there should be a message documenting the I/O error.

6. Test Results Summary 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 results summary.

Heading	Description
First Line	Test case ID and Name and version of software tested.
Case Summary:	Test case summary from *Disk Imaging Tool Specification, Version 3.1.6.*
Tester Name:	Name or initials of person executing test procedure.
Test Date	Time and date that test was started.
PC:	Name of computer where tool under test was executed.
Disks:	Description of the hard and removable disks used in the test as the source, destination, and media. The BIOS assigned drive number is in hexadecimal.
Source disk setup:	Documentation of the creation of the source disk including the disk label, the computer used for setup, person creating the source, time and date, partitions and operating systems installed, diskwipe command, disk hash after created, and the partition table for the source disk.
Destination Setup:	Documentation of the creation of the destination disk including the diskwipe command and a listing of the partition table if required for the test.
Error Setup:	Support software commands executed to setup either an I/O error or to corrupt an image file.
Execute:	Documentation of each command executed during the test.
Log files	Name and location of the log files in the test file

Heading	Description
loc:	archive.
Expected Results:	Expected results listed *in Disk Imaging Tool Specification, Version 3.1.6.*
Actual Results:	List of any anomalies observed.
Log File Highlights:	Selected entries from three of the test case log files: • Comparison of source and destination. • Hash of the source after test. • Any relevant messages logged during the test run.
Analysis:	Whether the expected results were achieved.

7. Interpretation of Test Results

There are six main questions of interest when examining the results of a test case:

- Is the source disk unchanged?
- Has the correct number of sectors been copied?
- Has the tool alerted the user to a destination smaller than the source?
- Has the tool handled excess destination sectors correctly as specified?
- Has the tool detected changes to an image file?
- Has the tool alerted the user to any I/O errors?

7.1 Source Disk

The integrity of the source disk is checked by comparing the hash of the source disk computed before any tests are run with the hash computed after the tool is used. If the two hash values are not the same, then there has been a change to the source disk by the tool. The reference hash is recorded in the **Source Disk Setup** box and the hash computed after the tool is run is recorded in the **Log File Highlights** box.

7.2 Number of Sectors Copied

The number of sectors that should be copied is the minimum of the number of source sectors and the number of destination sectors. This value can be found on the *sectors compared* line of the **Log File Highlights** box. If the next line of the **Log File Highlights** box, *sectors differ*, is not zero, then the tool did not correctly copy all the sectors that should have been copied. The LBAs of the first few sectors not copied correctly are listed on the *diffs range* line.

The number of sectors in the source and destination can be determined as follows: If the tool operated on an entire disk, then the size of the source and destination can be found in the **Disks** box. If the tool operated on a single partition, then the partition sizes are presented in the *partition tables* in the **Log File Highlights** box. The partitions used in the test are identified in the **/select** option parameters to the **PARTCMP** program execution presented in the **Execute**

box. The **/select** option is followed by two parameters: the partition numbers of the source and destination partitions.

7.3   Small Destination Detection

The tool should issue a message indicating that the destination is smaller than the source for any test case defined for a smaller destination. Such a test case would have the phrase "source . . . larger than the destination" in the **Case Summary** box. A message indicating "destination . . . is smaller or Insufficient . . . space" should be present in the **Log File Highlights** box.

7.4   Excess Sectors

For disk operations, the tool should either zero backfill (set to zero) excess sectors or leave the content as is depending on the *menu specification*. The setting of the menu specification and other values referred to can be found in the **Log File Highlights** box. There should be an entry labeled *Backfill on restore* to specify the tool action. The tool action can be verified by the entries labeled *Zero fill* and *Dst byte fill*, giving the count of sectors in each category. If backfill is enabled (*YES*), the number of zero-filled sectors should be the same as the number of excess sectors, and the value for *Dst byte fill* should be zero. If backfill is not enabled (*NO*), the number of zero-filled sectors should be zero, and the value for *Dst byte fill* should be the same as the number of excess sectors. The number of excess sectors is indicated by the line with the text " . . . [number of excess sectors] fewer sectors . . . ."

7.5   Changes to an Image File

The **Error Setup** box presents the command used to change the image file. If the tool detects that the image file has been changed, then the **Log File Highlights** box has a message indicating *CRC Mismatch*.

7.6   I/O Errors

The **Error Setup** box presents the command used to setup an I/O error. If the tool detects the I/O error, the **Log File Highlights** box has a message indicating the type and location of the error.

8. Test Results Summaries

Case DI-001 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Mon Oct 15 14:54:19 2001
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label B5 Destination: DOS Drive 81 Physical Label DB Image media: DOS Drive 82 Physical Label none B5 is a WDC AC21600H with 3173184 sectors DB is a Fujitsu MPE3064AT with 12672450 sectors

Case DI-001 for SafeBack 2.18	
	Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B5 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Mon Oct 15 11:18:11 2001 cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log Disk hash = BD4140E6924156E1870E00983701405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-001 Beta3 81 DB /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-001 Beta3 80 /all /new_log /comment JRL(B5) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-001 Beta3 80 B5 81 DB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-001 Beta3 80 /comment JRL(B5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-001

Log File
Highlights:
	Safeback log: DI-001/SB_001C.TXT
	       SafeBack 2.18 13Feb01 execution started on Oct 15, 2001 15:14.
	15:14:54 Menu selections:
	        Function: Copy
	        Direct access: No
	        Use XBIOS: No
	        Adjust partitions: No
	        Backfill on restore: No
	15:15:11 Copy from Local drive 0: to local drive 1:
	15:15:20 Copy of Local drive 0: to drive 1: begun on Oct 15, 2001 15:15
	15:15:20 Local SafeBack is running on DOS 6.30
	15:15:20 Partition table for drive 0:
	       Source drive 0:
	        Capacity........1549 MB
	        Cylinders.......787
	        Heads...........64
	       Destination drive 1:
	        Capacity........6181 MB
	        Cylinders.......788
	        Heads...........255
	15:30:57 Copy of drive 0: to drive 1: completed on Oct 15, 2001 15:30
	       SafeBack execution ended on Oct 15, 2001 15:32.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Source (3173184) has 9499266 fewer sectors than destination (12672450)
	Zero fill: 9486036
	Src Byte fill (B5): 0
	Dst Byte fill (DB): 13230
	Other fill: 0
	Other no fill: 0
	Hash after test: BD4140E6924156E1870E00983701405645359A00

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	BIOS anomaly, Backfill anomaly
Analysis:	Expected results not achieved

Case DI-002 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is smaller than the destination and sector fill is turned on

Case DI-002 for SafeBack 2.18	
Tester Name:	JRL
Test Date:	Tue Oct 16 08:50:47 2001
PC:	Beta1
Disks:	Source: DOS Drive 80 Physical Label B5 Destination: DOS Drive 81 Physical Label BA Image media: DOS Drive 82 Physical Label none B5 is a WDC AC21600H with 3173184 sectors BA is a QUANTUM FIREBALL ST3.2A with 6306048 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B5 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Mon Oct 15 11:18:11 2001 cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log Disk hash = BD4140E6924156E1870E00983701405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-002 Beta1 81 BA /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-002 Beta1 80 /all /new_log /comment JRL(B5) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-002 Beta1 80 B5 81 BA /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-002 Beta1 80 /comment JRL(B5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-002

Log File Highlights:	Safeback log: DI-002/SB_002C.TXT
	    SafeBack 2.18 13Feb01 execution started on Oct 16, 2001 09:00.
	09:01:00 Menu selections:
	    Function: Copy
	    Direct access: No
	    Use XBIOS: No
	    Adjust partitions: No
	    Backfill on restore: Yes
	09:01:11 Copy from Local drive 0: to local drive 1:
	09:01:17 Copy of Local drive 0: to drive 1: begun on Oct 16, 2001 09:01
	09:01:17 Local SafeBack is running on DOS 6.30
	09:01:17 Partition table for drive 0:
	    Source drive 0:
	     Capacity........1549 MB
	     Cylinders.......787
	     Heads...........64
	    Destination drive 1:
	     Capacity.......3079 MB
	     Cylinders.......782
	     Heads...........128
	09:13:21 Copy of drive 0: to drive 1: completed on Oct 16, 2001 09:13
	    SafeBack execution ended on Oct 16, 2001 09:15.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Source (3173184) has 3132864 fewer sectors than destination (6306048)
	Zero fill: 3132864
	Src Byte fill (B5): 0
	Dst Byte fill (BA): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: BD4140E6924156E1870E00983701405645359A00

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual	No anomalies

Case DI-002 for SafeBack 2.18	
Results:	
Analysis:	Expected results achieved

Case DI-003 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is smaller than the destination and cylinder adjustment is turned on
Tester Name:	JRL
Test Date:	Fri Oct 19 09:54:04 2001
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1 Destination: DOS Drive 81 Physical Label DB Image media: DOS Drive 82 Physical Label none A1 is a Quantum Sirooco1700A with 3335472 sectors DB is a Fujitsu MPE3064AT with 12672450 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: A1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Tue Oct 16 11:24:16 2001 cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-003 Beta3 81 DB /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-003 Beta3 80 /all /new_log /comment JRL(A1) z:\sb\master (copy) Z:\ss\ADJCMP.EXE DI-003 Beta3 80 A1 81 DB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-003 beta3 80 /comment JRL(A1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-003

Log File Highlights:	Source Disk Drive 0x80, BIOS: Legacy
	Interrupt 13 bios 0825/063/63 (max cyl/hd values)
	Interrupt 13 ext 00826/064/63 (number of cyl/hd)
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	  Start LBA Length Start C/H/S End C/H/S boot Partition type
	P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16
	X 001431360 001290240 0355/000/01 0674/063/63 05 extended
	S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	S 000000063 000145089 0406/001/01 0441/063/63 06 Fat16
	x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	S 000000063 000185409 0544/001/01 0589/063/63 16 other
	S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	P 002721600 000064512 0675/000/01 0690/063/63 83 Linux
	P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap
	Destination Disk Drive 0x81, BIOS: Legacy
	Interrupt 13 bios 0786/254/63 (max cyl/hd values)
	Interrupt 13 ext 00787/255/63 (number of cyl/hd)
	12643155 total number of sectors reported via interrupt 13 from the BIOS
	  Start LBA Length Start C/H/S End C/H/S boot Partition type
	P 000000063 001236942 0000/001/01 0076/254/63 Boot 06 Fat16
	X 001438605 001340640 0089/140/01 0172/254/63 05 extended
	S 000000063 000216027 0089/141/01 0102/254/63 83 Linux
	x 000216090 000160650 0103/000/01 0112/254/63 05 extended
	S 000000063 000160587 0103/001/01 0112/254/63 06 Fat16
	x 000788004 000199206 0138/153/01 0150/254/63 05 extended
	S 000000063 000199143 0138/154/01 0150/254/63 16 other
	S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry

Case DI-003 for SafeBack 2.18	

	P 002779245 000080325 0173/000/01 0177/254/63 83 Linux
	P 002996658 000425187 0186/136/01 0212/254/63 82 Linux swap
	Safeback log: DI-003/SB_003C.TXT
	          SafeBack 2.18 13Feb01 execution started on Oct 19, 2001 10:11.
	10:11:54 Menu selections:
	          Function: Copy
	          Direct access: No
	          Use XBIOS: No
	          Adjust partitions: Auto
	          Backfill on restore: No
	10:12:11 Copy from Local drive 0: to local drive 1:
	10:12:17 Copy of Local drive 0: to drive 1: begun on Oct 19, 2001 10:12
	10:12:17 Local SafeBack is running on DOS 6.30
	10:12:17 Partition table for drive 0:
	          Source drive 0:
	            Capacity........1628 MB
	            Cylinders.......827
	            Heads...........64
	          Destination drive 1:
	            Capacity.......6181 MB
	            Cylinders.......788
	            Heads...........255
	10:20:20 Partition table for drive 1:
	10:20:21 Copy of drive 0: to drive 1: completed on Oct 19, 2001 10:20
	          SafeBack execution ended on Oct 19, 2001 10:33.
	= = = = Measurement Logs = = = =
	Cylinder adjustment/alignment Summary
	Boot tracks 4 252 diffs 4
	Partitions 6 2241540 diffs 9
	Unallocated 5 1093680 diffs 1009
	Total src sectors 3335472
	Partition excess 76671 zero 74189 non-zero 2482
	Disk excess 9260307 zero 10363 non-zero 9249944
	Total dst sectors 12672450
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Cylinder Alignment anomaly
Analysis:	Expected results not achieved

Case DI-004 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is smaller than the destination and sector fill is turned on and cylinder adjustment is turned on
Tester Name:	JRL
Test Date:	Thu Oct 18 08:53:08 2001
PC:	Beta4
Disks:	Source: DOS Drive 80 Physical Label B5 Destination: DOS Drive 81 Physical Label DB Image media: DOS Drive 82 Physical Label none B5 is a WDC AC21600H with 3173184 sectors DB is a Fujitsu MPE3064AT with 12672450 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B5 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Mon Oct 15 11:18:11 2001 cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log

Case DI-004 for SafeBack 2.18	
	Disk hash = BD4140E6924156E1870E00983701405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-004 Beta4 81 DB /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-004 Beta4 80 /all /new_log /comment JRL(B5) z:\sb\master (copy) Z:\ss\ADJCMP.EXE DI-004 Beta4 80 B5 81 DB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-004 beta4 80 /comment JRL(B5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-004

Log File Highlights:	Source Disk Drive 0x80, BIOS: Legacy
	Interrupt 13 bios 0785/063/63 (max cyl/hd values)
	Interrupt 13 ext 00786/064/63 (number of cyl/hd)
	3169152 total number of sectors reported via interrupt 13 from the BIOS
	  Start LBA Length Start C/H/S End C/H/S boot Partition type
	P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16
	X 001431360 001128960 0355/000/01 0634/063/63 05 extended
	S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	S 000000063 000145089 0406/001/01 0441/063/63 06 Fat16
	x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	S 000000063 000185409 0544/001/01 0589/063/63 16 other
	S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	P 002560320 000064512 0635/001/01 0650/063/63 83 Linux
	P 002761920 000411264 0685/000/01 0786/063/63 82 Linux swap
	Destination Disk Drive 0x81, BIOS: Legacy
	Interrupt 13 bios 0786/254/63 (max cyl/hd values)
	Interrupt 13 ext 00787/255/63 (number of cyl/hd)
	12643155 total number of sectors reported via interrupt 13 from the BIOS
	  Start LBA Length Start C/H/S End C/H/S boot Partition type
	P 000000063 001236942 0000/001/01 0076/254/63 Boot 06 Fat16
	X 001438605 001179990 0089/140/01 0162/254/63 05 extended
	S 000000063 000216027 0089/141/01 0102/254/63 83 Linux
	x 000216090 000160650 0103/000/01 0112/254/63 05 extended
	S 000000063 000160587 0103/001/01 0112/254/63 06 Fat16
	x 000788004 000199206 0138/153/01 0150/254/63 05 extended
	S 000000063 000199143 0138/154/01 0150/254/63 16 other
	S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	P 002618595 000080325 0163/000/01 0167/254/63 83 Linux
	P 002836008 000425187 0176/136/01 0202/254/63 82 Linux swap
	Safeback log: DI-004/SB_004C.TXT
	     SafeBack 2.18 13Feb01 execution started on Oct 18, 2001 09:20.
	09:20:32 Menu selections:
	     Function: Copy
	     Direct access: No
	     Use XBIOS: No
	     Adjust partitions: Auto
	     Backfill on restore: Yes
	09:20:40 Copy from Local drive 0: to local drive 1:
	09:20:46 Copy of Local drive 0: to drive 1: begun on Oct 18, 2001 09:20
	09:20:46 Local SafeBack is running on DOS 6.30
	09:20:46 Partition table for drive 0:
	     Source drive 0:
	      Capacity........1549 MB
	      Cylinders.......787
	      Heads...........64
	     Destination drive 1:
	      Capacity........6181 MB
	      Cylinders.......788
	      Heads...........255
	09:36:25 Partition table for drive 1:
	09:36:26 Copy of drive 0: to drive 1: completed on Oct 18, 2001 09:36
	     SafeBack execution ended on Oct 18, 2001 09:37.
	= = = = Measurement Logs = = = =
	Cylinder adjustment/alignment Summary
	Boot tracks 4 252 diffs 4
	Partitions 6 2241540 diffs 9
	Unallocated 4 931392 diffs 1
	Total src sectors 3173184

Case DI-004 for SafeBack 2.18	
	Partition excess 76671 zero 74189 non-zero 2482 Disk excess 9422595 zero 9408998 non-zero 13597 Total dst sectors 12672450 Hash after test: BD4140E6924156E1870E00983701405645359A00
Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Cylinder Alignment anomaly
Analysis:	Expected results not achieved

Case DI-005 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is the same size as the destination Introduce a read error from the source.
Tester Name:	JRL
Test Date:	Mon Oct 07 12:08:32 2002
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1 Destination: DOS Drive 81 Physical Label D7 Image media: DOS Drive 80 Physical Label none A1 is a Quantum Sirooco1700A with 3335472 sectors D7 is a Quantum Sirooco1700A with 3335472 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: A1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Tue Oct 16 11:24:16 2001 cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-005 Beta3 81 D7 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	Z:\ss\baddisk 80 9 2 47 2 10 > a:\err-005.txt Z:\ss\baddisk 80 9 2 47 10 10 >> a:\err-005.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00002 from disk 00080 at address 00009/00002/00047 return code 00010 on command 00010 from disk 00080 at address 00009/00002/00047
Execute:	z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-005 Beta3 80 A1 81 D7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-005 JudgeDee 80 /comment A1(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-005

Log File
Highlights:
	Safeback log: DI-005/SB_005C.TXT
	      SafeBack 2.18 13Feb01 execution started on Oct 7, 2002 12:18.
	12:18:49 Menu selections:
	        Function: Copy
	        Direct access: No
	        Use XBIOS: No
	        Adjust partitions: No
	        Backfill on restore: No
	12:18:59 Copy from Local drive 0: to local drive 1:
	12:19:04 Copy of Local drive 0: to drive 1: begun on Oct 7, 2002 12:19
	12:19:04 Local SafeBack is running on DOS 7.10
	12:19:04 Partition table for drive 0:
	      Source drive 0:
	        Capacity........1628 MB

Case DI-005 for SafeBack 2.18	
	Cylinders.......827
	Heads...........64
	Destination drive 1:
	Capacity........1628 MB
	Cylinders.......827
	Heads...........64
	12:19:10 While reading drive 0: a sector flagged bad error (status 0a)
	occurred:
	at relative sector 36460 (Cylinder 9, Head 2, Sector 47)
	12:27:39 Copy of drive 0: to drive 1: completed on Oct 7, 2002 12:27
	SafeBack execution ended on Oct 7, 2002 12:29.
	= = = = Measurement Logs = = = =
	Sectors Compared 3335472
	Sectors Differ 1009
	Diffs range 36460, 3334464-3335471
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst
	error message logged
Actual Results:	BIOS anomaly
Analysis:	Expected results not achieved

Case DI-006 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk
	to a BIOS-IDE destination disk
	where the source disk is the same size as the destination
	Introduce a write error to the destination.
Tester Name:	JRL
Test Date:	Mon Oct 07 13:50:36 2002
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1
	Destination: DOS Drive 81 Physical Label D7
	Image media: DOS Drive 80 Physical Label none
	A1 is a Quantum Sirooco1700A with 3335472 sectors
	D7 is a Quantum Sirooco1700A with 3335472 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16
	Disk: A1
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Tue Oct 16 11:24:16 2001
	cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\nex-src.txt
	Load Operating System to Source disk
	cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log
	Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-006 Beta3 81 D7 /noask /dst /new_log /comment JRL
	No partition table defined
Error Setup:	Z:\ss\baddisk 81 8 63 3 3 10 > a:\err-006.txt
	Version 3.2 Created 06/05/02 at 13:50:39
	baddisk compiled on 06/05/02 at 12:19:31
	return code 00010 on command 00003 from disk 00081
	at address 00008/00063/00003
Execute:	z:\sb\master (copy)
	Z:\ss\DISKCMP.EXE DI-006 Beta3 80 A1 81 D7 /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-006 JudgeDee 80 /comment A1(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-006
Log File Highlights:	Safeback log: DI-006/SB_006C.TXT
	SafeBack 2.18 13Feb01 execution started on Oct 7, 2002 14:04.
	14:04:59 Menu selections:
	Function: Copy

Case DI-006 for SafeBack 2.18	

	Direct access: No
	              Use XBIOS: No
	              Adjust partitions: No
	              Backfill on restore: No
	14:05:10 Copy from Local drive 0: to local drive 1:
	14:05:13 Copy of Local drive 0: to drive 1: begun on Oct 7, 2002 14:05
	14:05:13 Local SafeBack is running on DOS 7.10
	14:05:13 Partition table for drive 0:
	              Source drive 0:
	                Capacity........1628 MB
	                Cylinders.......827
	                Heads...........64
	              Destination drive 1:
	                Capacity........1628 MB
	                Cylinders.......827
	                Heads...........64
	14:05:19 While writing drive 1:, a sector flagged bad error (status 0a) occurred
	          at relative sector 36227 (Cylinder 8, Head 63, Sector 3)
	14:13:48 Copy of drive 0: to drive 1: completed on Oct 7, 2002 14:13
	          SafeBack execution ended on Oct 7, 2002 14:26.
	= = = = Measurement Logs = = = =
	Sectors Compared 3335472
	Sectors Differ 1076
	Diffs range 36227-36294, 3334464-3335471
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F

Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	BIOS anomaly
Analysis:	Expected results not achieved

Case DI-007 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is the same size as the destination
Tester Name:	JRL
Test Date:	Thu Oct 18 13:45:57 2001
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1 Destination: DOS Drive 81 Physical Label D7 Image media: DOS Drive 82 Physical Label none A1 is a Quantum Sirooco1700A with 3335472 sectors D7 is a Quantum Sirooco1700A with 3335472 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: A1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Tue Oct 16 11:24:16 2001 cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-007 Beta3 81 D7 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-007 Beta3 80 /all /new_log /comment JRL(A1) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-007 Beta3 80 A1 81 D7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-007 beta3 80 /comment JRL(A1) /new_log /after

Case DI-007 for SafeBack 2.18	
Log files loc:	test-archive/sb/sb-2.18/DI-007

Log File Highlights:	Safeback log: DI-007/SB_007C.TXT
	      SafeBack 2.18 13Feb01 execution started on Oct 18, 2001 14:08.
	14:08:46 Menu selections:
	      Function: Copy
	      Direct access: No
	      Use XBIOS: No
	      Adjust partitions: No
	      Backfill on restore: No
	14:08:59 Copy from Local drive 0: to local drive 1:
	14:09:04 Copy of Local drive 0: to drive 1: begun on Oct 18, 2001 14:09
	14:09:04 Local SafeBack is running on DOS 6.30
	14:09:04 Partition table for drive 0:
	      Source drive 0:
	        Capacity........1628 MB
	        Cylinders.......827
	        Heads...........64
	      Destination drive 1:
	        Capacity........1628 MB
	        Cylinders.......827
	        Heads...........64
	14:17:54 Copy of drive 0: to drive 1: completed on Oct 18, 2001 14:17
	      SafeBack execution ended on Oct 18, 2001 14:18.
	= = = = Measurement Logs = = = =
	Sectors Compared 3335472
	Sectors Differ 1008
	Diffs range 3334464-3335471
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F

Expected Results:	Source disk is unchanged src compares equal to dst
Actual Results:	BIOS anomaly
Analysis:	Expected results not achieved

Case DI-008 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Tue Oct 23 13:50:52 2001
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1 Destination: DOS Drive 81 Physical Label B9 Image media: DOS Drive 82 Physical Label none A1 is a Quantum Sirooco1700A with 3335472 sectors B9 is a WDC AC21600H with 3173184 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: A1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Tue Oct 16 11:24:16 2001 cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-008 Beta3 81 B9 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-008 Beta3 80 /all /new_log /comment JRL(A1) z:\sb\master (copy)

Case DI-008 for SafeBack 2.18	
	Z:\ss\DISKCMP.EXE DI-008 Beta3 80 A1 81 B9 /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-008 beta3 80 /comment JRL(A1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-008
Log File Highlights:	Safeback log: DI-008/SB_008C.TXT
	SafeBack 2.18 13Feb01 execution started on Oct 23, 2001 13:57.
	13:58:11 Menu selections:
	Function: Copy
	Direct access: No
	Use XBIOS: No
	Adjust partitions: No
	Backfill on restore: No
	13:58:24 Copy from Local drive 0: to local drive 1:
	13:58:24 Insufficient destination file space projected.
	13:58:34 Copy of Local drive 0: to drive 1: begun on Oct 23, 2001 13:58
	13:58:34 Local SafeBack is running on DOS 6.30
	13:58:34 Partition table for drive 0:
	Source drive 0:
	Capacity........1628 MB
	Cylinders.......827
	Heads...........64
	Destination drive 1:
	Capacity........1549 MB
	Cylinders.......787
	Heads...........64
	14:08:41 Copy of drive 0: to drive 1: completed on Oct 23, 2001 14:08
	SafeBack execution ended on Oct 23, 2001 14:09.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Source (3335472) has 162288 more sectors than destination (3173184)
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst, src is truncated on dst
	truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-009 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk
	to a BIOS-IDE destination disk
	and the source contains a FAT12 partition
	where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Sat Mar 09 17:50:38 2002
PC:	Beta7
Disks:	Source: DOS Drive 80 Physical Label A4
	Destination: DOS Drive 81 Physical Label D7
	Image media: DOS Drive 82 Physical Label none
	A4 is a Quantum Sirooco1700A with 3335472 sectors
	D7 is a Quantum Sirooco1700A with 3335472 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Fat12 only
	Disk: A4
	Host: Beta7
	Operator: BJL
	OS: none
	Options: FAT12
	Date: Fri Mar 08 16:17:24 2002
	cmd: Z:\ss\DISKWIPE.EXE A4 Beta7 80 A4 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\f12-src.txt
	No OS loaded, FAT12 partition only
	cmd: Z:\ss\DISKHASH.EXE A4 Beta7 80 /before /new_log
	Disk hash = 95C65798A1068A5BB47AC55C5D34F7BCDCF926E6

Case DI-009 for SafeBack 2.18	
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-009 Beta7 81 D7 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=A:\PM\D12L-SS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 000020097 0000/001/01 0004/063/63 01 Fat12
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-009 Beta7 80 /all /new_log /comment JRL(D7) Z:\ss\PARTAB.EXE DI-009 Beta7 81 /all /new_log /comment JRL(D7) z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-009 Beta7 80 A4 81 D7 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-009 Beta7 80 /comment JRL(A4) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-009

Log File Highlights:	Source disk Drive 0x80, BIOS: Legacy
	Interrupt 13 bios 0825/063/63 (max cyl/hd values)
	Interrupt 13 ext 00826/064/63 (number of cyl/hd)
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 000016065 0000/001/01 0003/063/63 01 Fat12
	 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
	Destination disk Drive 0x81, BIOS: Legacy
	Interrupt 13 bios 0825/063/63 (max cyl/hd values)
	Interrupt 13 ext 00826/064/63 (number of cyl/hd)
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 000020097 0000/001/01 0004/063/63 01 Fat12
	 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
	Safeback log: DI-009/SB_009C.TXT
	         SafeBack 2.18 13Feb01 execution started on Mar 9, 2002 18:05.
	18:05:52 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: No
	            Adjust partitions: No
	            Backfill on restore: No
	18:06:11 Copy from Local drive C: to local drive D:
	18:06:21 Partition/Boot information saved to A:\PT.SPS.
	18:06:22 Copy of Local drive C: to drive D: begun on Mar 9, 2002 18:06
	18:06:22 Local SafeBack is running on DOS 6.30
	            Source drive C:
	              Capacity........8 MB
	              Cylinders.......3
	              Heads...........64
	            Destination drive D:
	              Capacity.......10 MB
	              Cylinders.......4
	              Heads...........64
	18:06:25 Copy of drive C: to drive D: completed on Mar 9, 2002 18:06
	         SafeBack execution ended on Mar 9, 2002 18:06.
	= = = = Measurement Logs = = = =
	Sectors Compared 16065
	Sectors Differ 0
	Diffs range:
	Source (16065) has 4032 fewer sectors than destination (20097)
	Zero fill: 0
	Src Byte fill (A4): 0
	Dst Byte fill (D7): 4032
	Other fill: 0
	Other no fill: 0
	Hash after test: 95C65798A1068A5BB47AC55C5D34F7BCDCF926E6

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-010 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk and the source contains a FAT16 partition where the source disk is smaller than the destination and sector fill is turned on
Tester Name:	JRL
Test Date:	Mon Nov 05 12:08:28 2001
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label B5 Destination: DOS Drive 81 Physical Label B9 Image media: DOS Drive 82 Physical Label none B5 is a WDC AC21600H with 3173184 sectors B9 is a WDC AC21600H with 3173184 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B5 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Mon Oct 15 11:18:11 2001 cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log Disk hash = BD4140E6924156E1870E00983701405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-010 Beta3 81 B9 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16L-SS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001334529 0000/001/01 0330/063/63 06 Fat16
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-010 Beta3 80 /all /new_log /comment JRL(B9) Z:\ss\PARTAB.EXE DI-010 Beta3 81 /all /new_log /comment JRL(B9) z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-010 Beta3 80 B5 81 B9 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-010 beta4 80 /comment JRL(B5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-010
Log File Highlights:	Source disk Drive 0x80, BIOS: Legacy Interrupt 13 bios 0785/063/63 (max cyl/hd values) Interrupt 13 ext 00786/064/63 (number of cyl/hd) 3169152 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16 2 X 001431360 001128960 0355/000/01 0634/063/63 05 extended 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended 5 S 000000063 000145089 0406/001/01 0441/063/63 06 Fat16 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 002560320 000064512 0635/000/01 0650/063/63 83 Linux 10 P 002761920 000411264 0685/000/01 0786/063/63 82 Linux swap Destination disk Drive 0x81, BIOS: Legacy Interrupt 13 bios 0785/063/63 (max cyl/hd values) Interrupt 13 ext 00786/064/63 (number of cyl/hd) 3169152 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001334529 0000/001/01 0330/063/63 06 Fat16 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 Safeback log: DI-010/SB_010C.TXT SafeBack 2.18 13Feb01 execution started on Nov 5, 2001 11:33.

Case DI-010 for SafeBack 2.18	

	11:34:14 Menu selections:
	                    Function: Copy
	                    Direct access: No
	                    Use XBIOS: No
	                    Adjust partitions: No
	                    Backfill on restore: Yes
	11:34:44 Copy from Local drive C: to local drive D:
	11:34:49 Partition/Boot information saved to A:\PT.SPS.
	11:34:51 Copy of Local drive C: to drive D: begun on Nov 5, 2001 11:34
	11:34:51 Local SafeBack is running on DOS 6.30
	                    Source drive C:
	                       Capacity........600 MB
	                       Cylinders.......304
	                       Heads...........64
	                    Destination drive D:
	                       Capacity........652 MB
	                       Cylinders.......330
	                       Heads...........64
	11:42:06 Copy of drive C: to drive D: completed on Nov 5, 2001 11:42
	                    SafeBack execution ended on Nov 5, 2001 11:42.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 0
	Diffs range:
	Source (1229697) has 104832 fewer sectors than destination (1334529)
	Zero fill: 0
	Src Byte fill (B5): 0
	Dst Byte fill (B9): 104832
	Other fill: 0
	Other no fill: 0
	Hash after test: BD4140E6924156E1870E00983701405645359A00

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-014 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk and the source contains a FAT16 partition where the source disk is the same size as the destination Introduce a read error from the source.
Tester Name:	JRL
Test Date:	Sun Jun 16 15:58:57 2002
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label B5 Destination: DOS Drive 81 Physical Label A4 Image media: DOS Drive 80 Physical Label none B5 is a WDC AC21600H with 3173184 sectors A4 is a Quantum Sirooco1700A with 3335472 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B5 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Mon Oct 15 11:18:11 2001 cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log Disk hash = BD4140E6924156E1870E00983701405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-014 Beta3 81 A4 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16L-ES.txt

Case DI-014 for SafeBack 2.18	
	See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 80 6 11 43 2 10 > a:\err-014.txt Z:\ss\baddisk 80 6 11 43 10 10 >> a:\err-014.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00002 from disk 00080 at address 00006/00011/00043 return code 00010 on command 00010 from disk 00080 at address 00006/00011/00043
Execute:	z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-014 Beta3 80 B5 81 A4 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-014 JudgeDee 80 /comment JRL(B5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-014

Log File Highlights:	Source disk Drive 0x80, BIOS: Legacy
	Interrupt 13 bios 0785/063/63 (max cyl/hd values)
	Interrupt 13 ext 00786/064/63 (number of cyl/hd)
	3169152 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16
	 2 X 001431360 001128960 0355/000/01 0634/063/63 05 extended
	 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	 5 S 000000063 000145089 0406/001/01 0441/063/63 06 Fat16
	 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 002560320 000064512 0635/000/01 0650/063/63 83 Linux
	10 P 002761920 000411264 0685/000/01 0786/063/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Legacy
	Interrupt 13 bios 0825/063/63 (max cyl/hd values)
	Interrupt 13 ext 00826/064/63 (number of cyl/hd)
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 06 Fat16
	 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
	Safeback log: DI-014/SB_014C.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 16:18.
	16:18:47 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	16:18:57 Copy from Local drive C: to local drive D:
	16:19:02 Partition/Boot information saved to A:\PT.SPS.
	16:19:03 Copy of Local drive C: to drive D: begun on Jun 16, 2002 16:19
	16:19:03 Local SafeBack is running on DOS 7.10
	            Source drive C:
	              Capacity........600 MB
	              Cylinders.......304
	              Heads...........64
	            Destination drive D:
	              Capacity........600 MB
	              Cylinders.......304
	              Heads...........64
	16:19:10 While reading drive C: a bad address mark error (status 02)
	occurred:
	            at relative sector 24864 (Cylinder 6, Head 10, Sector 43)
	16:22:21 Copy of drive C: to drive D: completed on Jun 16, 2002 16:22
	            SafeBack execution ended on Jun 16, 2002 16:28.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 1
	Diffs range: 24864
	Hash after test: BD4140E6924156E1870E00983701405645359A00

Expected	Source disk is unchanged

Case DI-014 for SafeBack 2.18	
Results:	src compares qualified equal to dst error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-015 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk and the source contains a FAT32 partition where the source disk is the same size as the destination Introduce a write error to the destination.
Tester Name:	JRL
Test Date:	Sun Jun 16 16:11:02 2002
PC:	Beta7
Disks:	Source: DOS Drive 80 Physical Label F1 Destination: DOS Drive 81 Physical Label D7 Image media: DOS Drive 80 Physical Label none F1 is a Quantum Sirooco1700A with 3335472 sectors D7 is a Quantum Sirooco1700A with 3335472 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32 Disk: F1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Fri Nov 16 10:42:33 2001 cmd: Z:\ss\DISKWIPE.EXE F1 JudgeDee 80 F1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE F1 JudgeDee 80 /before /new_log Disk hash = 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-015 Beta7 81 D7 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32L-ES.txt See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 81 0 27 60 3 10 > a:\err-015.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00003 from disk 00081 at address 00000/00027/00060
Execute:	z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-015 Beta7 80 F1 81 D7 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-015 Beta7 80 /comment F1(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-015
Log File Highlights:	Source disk Drive 0x80, BIOS: Legacy Interrupt 13 bios 0825/063/63 (max cyl/hd values) Interrupt 13 ext 00826/064/63 (number of cyl/hd) 3330432 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 0B Fat32 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended 5 S 000000063 000145089 0406/001/01 0441/063/63 0B Fat32 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux 10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap Destination disk Drive 0x81, BIOS: Legacy Interrupt 13 bios 0825/063/63 (max cyl/hd values) Interrupt 13 ext 00826/064/63 (number of cyl/hd)

Case DI-015 for SafeBack 2.18	
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	N Start LBA Length Start C/H/S End C/H/S boot Partition type
	1 P 000000063 001229697 0000/001/01 0304/063/63 0B Fat32
	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
	Safeback log: DI-015/SB_015C.TXT
	SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 16:30.
	16:30:17 Menu selections:
	Function: Copy
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	16:30:24 Copy from Local drive C: to local drive D:
	16:30:28 Partition/Boot information saved to A:\PT.SPS.
	16:30:29 Copy of Local drive C: to drive D: begun on Jun 16, 2002 16:30
	16:30:29 Local SafeBack is running on DOS 7.10
	Source drive C:
	Capacity........600 MB
	Cylinders.......304
	Heads..........64
	Destination drive D:
	Capacity........600 MB
	Cylinders.......304
	Heads..........64
	16:30:31 While writing drive D:, a bad address mark error (status 02) occurred
	at relative sector 1697 (Cylinder 0, Head 26, Sector 60)
	16:33:01 Copy of drive C: to drive D: completed on Jun 16, 2002 16:33
	SafeBack execution ended on Jun 16, 2002 16:38.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 89
	Diffs range: 1, 1697-1784
	Hash after test: 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-016 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk and the source contains a FAT16 partition where the source disk is the same size as the destination
Tester Name:	JRL
Test Date:	Mon Nov 05 14:14:02 2001
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1 Destination: DOS Drive 81 Physical Label B9 Image media: DOS Drive 82 Physical Label none A1 is a Quantum Sirooco1700A with 3335472 sectors B9 is a WDC AC21600H with 3173184 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: A1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Tue Oct 16 11:24:16 2001 cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk

Case DI-016 for SafeBack 2.18	
	cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-016 Beta3 81 B9 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16L-ES.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 06 Fat16
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-016 Beta3 80 /all /new_log /comment JRL(B9) Z:\ss\PARTAB.EXE DI-016 Beta3 81 /all /new_log /comment JRL(B9) z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-016 Beta3 80 A1 81 B9 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-016 delta1 80 /comment JRL(A1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-016

Log File
Highlights:
	Source disk Drive 0x80, BIOS: Legacy
	Interrupt 13 bios 0825/063/63 (max cyl/hd values)
	Interrupt 13 ext 00826/064/63 (number of cyl/hd)
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16
	 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended
	 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	 5 S 000000063 000145089 0406/001/01 0441/063/63 06 Fat16
	 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux
	10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Legacy
	Interrupt 13 bios 0785/063/63 (max cyl/hd values)
	Interrupt 13 ext 00786/064/63 (number of cyl/hd)
	3169152 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 06 Fat16
	 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
	Safeback log: DI-016/SB_016C.TXT
	       SafeBack 2.18 13Feb01 execution started on Nov 5, 2001 13:19.
	13:19:52 Menu selections:
	        Function: Copy
	        Direct access: No
	        Use XBIOS: No
	        Adjust partitions: No
	        Backfill on restore: No
	13:20:04 Copy from Local drive C: to local drive D:
	13:20:07 Partition/Boot information saved to A:\PT.SPS.
	13:20:08 Copy of Local drive C: to drive D: begun on Nov 5, 2001 13:20
	13:20:08 Local SafeBack is running on DOS 6.30
	       Source drive C:
	         Capacity........600 MB
	         Cylinders.......304
	         Heads...........64
	       Destination drive D:
	         Capacity........600 MB
	         Cylinders.......304
	         Heads...........64
	13:24:02 Copy of drive C: to drive D: completed on Nov 5, 2001 13:24
	       SafeBack execution ended on Nov 5, 2001 13:27.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 0
	Diffs range:
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F

Expected Results:	Source disk is unchanged src compares equal to dst

Case DI-016 for SafeBack 2.18	
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-017 for SafeBack 2.18	
Case Summary:	Copy a BIOS-IDE source disk to a BIOS-IDE destination disk and the source contains a FAT32 partition where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Mon Nov 19 10:54:05 2001
PC:	Beta7
Disks:	Source: DOS Drive 80 Physical Label F1 Destination: DOS Drive 81 Physical Label A4 Image media: DOS Drive 82 Physical Label none F1 is a Quantum Sirooco1700A with 3335472 sectors A4 is a Quantum Sirooco1700A with 3335472 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32 Disk: F1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Fri Nov 16 10:42:33 2001 cmd: Z:\ss\DISKWIPE.EXE F1 JudgeDee 80 F1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE F1 JudgeDee 80 /before /new_log Disk hash = 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-017 Beta7 81 A4 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32L-BS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001128897 0000/001/01 0279/063/63 0B Fat32
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-017 Beta7 80 /all /new_log /comment JRL(A4) Z:\ss\PARTAB.EXE DI-017 Beta7 81 /all /new_log /comment JRL(A4) z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-017 Beta7 80 F1 81 A4 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-017 beta7 80 /comment JRL(F1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-017
Log File Highlights:	Source disk Drive 0x80, BIOS: Legacy Interrupt 13 bios 0825/063/63 (max cyl/hd values) Interrupt 13 ext 00826/064/63 (number of cyl/hd) 3330432 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 0B Fat32 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended 5 S 000000063 000145089 0406/001/01 0441/063/63 0B Fat32 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux 10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap Destination disk Drive 0x81, BIOS: Legacy Interrupt 13 bios 0825/063/63 (max cyl/hd values) Interrupt 13 ext 00826/064/63 (number of cyl/hd) 3330432 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001128897 0000/001/01 0279/063/63 0B Fat32 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

Case DI-017 for SafeBack 2.18	

	4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	Safeback log: DI-017/SB_017C.TXT
	        SafeBack 2.18 13Feb01 execution started on Nov 19, 2001 11:41.
	11:42:10 Menu selections:
	             Function: Copy
	             Direct access: No
	             Use XBIOS: No
	             Adjust partitions: No
	             Backfill on restore: No
	11:42:22 Copy from Local drive C: to local drive D:
	11:42:22 Insufficient destination file space projected.
	11:42:32 Partition/Boot information saved to A:\PT.SPS.
	11:42:34 Copy of Local drive C: to drive D: begun on Nov 19, 2001 11:42
	11:42:34 Local SafeBack is running on DOS 7.10
	             Source drive C:
	               Capacity........600 MB
	               Cylinders.......304
	               Heads...........64
	             Destination drive D:
	               Capacity.......551 MB
	               Cylinders......279
	               Heads..........64
	11:44:49 Copy of drive C: to drive D: completed on Nov 19, 2001 11:44
	             SafeBack execution ended on Nov 19, 2001 11:51.
	= = = = Measurement Logs = = = =
	Sectors Compared 1128897
	Sectors Differ 1
	Diffs range: 1
	Source (1229697) has 100800 more sectors than destination (1128897)
	Hash after test: 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A

Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-018 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-IDE destination disk where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Tue Oct 23 15:15:08 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label B6 Destination: DOS Drive 81 Physical Label BB Image media: DOS Drive 82 Physical Label none B6 is a WDC AC21600H with 3173184 sectors BB is a QUANTUM FIREBALL ST3.2A with 6306048 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B6 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 16:51:15 2001 cmd: Z:\ss\DISKWIPE.EXE B6 JudgeDee 80 B6 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B6 JudgeDee 80 /before /new_log Disk hash = 9AE1258B907A84E4AD2355BDCC21E9626822F071
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-018 Cadfael 81 BB /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-018 Cadfael 80 /all /new_log /comment JRL(B6)

Case DI-018 for SafeBack 2.18	
	z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-018 Cadfael 80 B6 81 BB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-018 cadfael 80 /comment JRL(B6) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-018

Log File Highlights:	Safeback log: DI-018/SB_018C.TXT
	       SafeBack 2.18 13Feb01 execution started on Oct 23, 2001 15:24.
	15:25:13 Menu selections:
	        Function: Copy
	        Direct access: No
	        Use XBIOS: Yes
	        Adjust partitions: No
	        Backfill on restore: No
	15:25:23 Copy from Local drive 0: to local drive 1:
	15:25:28 Copy of Local drive 0: to drive 1: begun on Oct 23, 2001 15:25
	15:25:28 Local SafeBack is running on DOS 6.30
	15:25:28 Partition table for drive 0:
	        Source drive 0:
	          Capacity........1549 MB
	          Cylinders.......3148
	          Heads...........16
	        Destination drive 1:
	          Capacity.......3079 MB
	          Cylinders.......6256
	          Heads...........16
	15:37:55 Copy of drive 0: to drive 1: completed on Oct 23, 2001 15:37
	       SafeBack execution ended on Oct 23, 2001 15:38.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Source (3173184) has 3132864 fewer sectors than destination (6306048)
	Zero fill: 3132864
	Src Byte fill (B6): 0
	Dst Byte fill (BB): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 9AE1258B907A84E4AD2355BDCC21E9626822F071

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-019 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-IDE destination disk where the source disk is smaller than the destination and sector fill is turned on
Tester Name:	JRL
Test Date:	Thu Oct 25 13:39:50 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label B6 Destination: DOS Drive 81 Physical Label BB Image media: DOS Drive 82 Physical Label none B6 is a WDC AC21600H with 3173184 sectors BB is a QUANTUM FIREBALL ST3.2A with 6306048 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B6 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 16:51:15 2001 cmd: Z:\ss\DISKWIPE.EXE B6 JudgeDee 80 B6 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt

Case DI-019 for SafeBack 2.18

	Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B6 JudgeDee 80 /before /new_log Disk hash = 9AE1258B907A84E4AD2355BDCC21E9626822F071
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-019 Cadfael 81 BB /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-019 Cadfael 80 /all /new_log /comment JRL(B6) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-019 Cadfael 80 B6 81 BB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-019 cadfael 80 /comment JRL(B6) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-019

Log File
Highlights:
	Safeback log: DI-019/SB_019C.TXT
	          SafeBack 2.18 13Feb01 execution started on Oct 25, 2001 13:48.
	13:48:26 Menu selections:
	                Function: Copy
	                Direct access: No
	                Use XBIOS: Yes
	                Adjust partitions: No
	                Backfill on restore: Yes
	13:48:48 Copy from Local drive 0: to local drive 1:
	13:48:53 Copy of Local drive 0: to drive 1: begun on Oct 25, 2001 13:48
	13:48:53 Local SafeBack is running on DOS 6.30
	13:48:53 Partition table for drive 0:
	                Source drive 0:
	                  Capacity........1549 MB
	                  Cylinders.......3148
	                  Heads...........16
	                Destination drive 1:
	                  Capacity........3079 MB
	                  Cylinders.......6256
	                  Heads...........16
	14:01:17 Copy of drive 0: to drive 1: completed on Oct 25, 2001 14:01
	          SafeBack execution ended on Oct 25, 2001 14:25.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Source (3173184) has 3132864 fewer sectors than destination (6306048)
	Zero fill: 3132864
	Src Byte fill (B6): 0
	Dst Byte fill (BB): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 9AE1258B907A84E4AD2355BDCC21E9626822F071

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-020 for SafeBack 2.18

Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-IDE destination disk where the source disk is the same size as the destination Introduce a read error from the source.
Tester Name:	JRL
Test Date:	Fri Oct 19 10:34:20 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label B6 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label none B6 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk	Linux EXT2 & DOS Fat16

Case DI-020 for SafeBack 2.18	
setup:	Disk: B6 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 16:51:15 2001 cmd: Z:\ss\DISKWIPE.EXE B6 JudgeDee 80 B6 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B6 JudgeDee 80 /before /new_log Disk hash = 9AE1258B907A84E4AD2355BDCC21E9626822F071
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-020 Cadfael 81 B7 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	Z:\ss\badx13 80 42 10 8929 > a:\err-020.txt Version 3.1 Created 10/11/01 at 12:41:45 badx13 compiled on 10/11/01 at 12:43:21 Return error code 10 for X13 command 42 from drive 80 at LBA sector 8,929
Execute:	Z:\ss\PARTAB.EXE DI-020 Cadfael 80 /all /new_log /comment JRL(B6) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-020 Cadfael 80 B6 81 B7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-020 cadfael 80 /comment JRL(B6) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-020

Log File
Highlights:
	Safeback log: DI-020/SB_020C.TXT
	        SafeBack 2.18 13Feb01 execution started on Oct 19, 2001 10:40.
	10:41:12 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: No
	10:41:25 Copy from Local drive 0: to local drive 1:
	10:41:31 Copy of Local drive 0: to drive 1: begun on Oct 19, 2001 10:41
	10:41:31 Local SafeBack is running on DOS 6.30
	10:41:31 Partition table for drive 0:
	        Source drive 0:
	          Capacity........1549 MB
	          Cylinders.......3148
	          Heads...........16
	        Destination drive 1:
	          Capacity........1549 MB
	          Cylinders.......3148
	          Heads...........16
	10:41:34 While reading drive 0: a sector flagged bad error (status 0a)
	occurred:
	        at relative sector 8929 (Cylinder 8, Head 13, Sector 47)
	10:52:11 Copy of drive 0: to drive 1: completed on Oct 19, 2001 10:52
	        SafeBack execution ended on Oct 19, 2001 10:52.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 1
	Diffs range 8929
	Hash after test: 9AE1258B907A84E4AD2355BDCC21E9626822F071

Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-021 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-IDE destination disk where the source disk is the same size as the destination Introduce a write error to the destination.
Tester Name:	JRL
Test Date:	Fri Oct 19 13:05:07 2001

Case DI-021 for SafeBack 2.18	
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label B6 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label none B6 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B6 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 16:51:15 2001 cmd: Z:\ss\DISKWIPE.EXE B6 JudgeDee 80 B6 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B6 JudgeDee 80 /before /new_log Disk hash = 9AE1258B907A84E4AD2355BDCC21E9626822F071
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-021 Cadfael 81 B7 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	Z:\ss\badx13 81 43 10 7392 > a:\err-021.txt Version 3.1 Created 10/11/01 at 12:41:45 badx13 compiled on 10/11/01 at 12:43:21 Return error code 10 for X13 command 43 from drive 81 at LBA sector 7,392
Execute:	Z:\ss\PARTAB.EXE DI-021 Cadfael 80 /all /new_log /comment JRL(B6) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-021 Cadfael 80 B6 81 B7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-021 cadfael 80 /comment JRL(B6) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-021

Log File Highlights:	Safeback log: DI-021/SB_021C.TXT
	    SafeBack 2.18 13Feb01 execution started on Oct 19, 2001 13:11.
	13:12:02 Menu selections:
	     Function: Copy
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	13:12:12 Copy from Local drive 0: to local drive 1:
	13:12:16 Copy of Local drive 0: to drive 1: begun on Oct 19, 2001 13:12
	13:12:16 Local SafeBack is running on DOS 6.30
	13:12:16 Partition table for drive 0:
	     Source drive 0:
	       Capacity........1549 MB
	       Cylinders.......3148
	       Heads...........16
	     Destination drive 1:
	       Capacity........1549 MB
	       Cylinders.......3148
	       Heads...........16
	13:12:18 While writing drive 1:, a sector flagged bad error (status 0a) occurred
	     at relative sector 7392 (Cylinder 7, Head 5, Sector 22)
	13:22:04 Copy of drive 0: to drive 1: completed on Oct 19, 2001 13:22
	     SafeBack execution ended on Oct 19, 2001 13:27.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 105
	Diffs range 7392-7496
	Hash after test: 9AE1258B907A84E4AD2355BDCC21E9626822F071

Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	No anomalies

Case DI-021 for SafeBack 2.18	
Analysis:	Expected results achieved

Case DI-022 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-IDE destination disk where the source disk is the same size as the destination
Tester Name:	JRL
Test Date:	Fri Oct 19 14:17:05 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label B6 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label none B6 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B6 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 16:51:15 2001 cmd: Z:\ss\DISKWIPE.EXE B6 JudgeDee 80 B6 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B6 JudgeDee 80 /before /new_log Disk hash = 9AE1258B907A84E4AD2355BDCC21E9626822F071
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-022 Cadfael 81 B7 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-022 Cadfael 80 /all /new_log /comment JRL(B6) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-022 Cadfael 80 B6 81 B7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-022 cadfael 80 /comment JRL(B6) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-022

Log File
Highlights:
	Safeback log: DI-022/SB_022C.TXT
	        SafeBack 2.18 13Feb01 execution started on Oct 19, 2001 14:24.
	14:24:39 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: No
	14:24:51 Copy from Local drive 0: to local drive 1:
	14:24:56 Copy of Local drive 0: to drive 1: begun on Oct 19, 2001 14:24
	14:24:56 Local SafeBack is running on DOS 6.30
	14:24:56 Partition table for drive 0:
	        Source drive 0:
	          Capacity........1549 MB
	          Cylinders.......3148
	          Heads...........16
	        Destination drive 1:
	          Capacity........1549 MB
	          Cylinders.......3148
	          Heads...........16
	14:35:18 Copy of drive 0: to drive 1: completed on Oct 19, 2001 14:35
	        SafeBack execution ended on Oct 19, 2001 17:39.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Hash after test: 9AE1258B907A84E4AD2355BDCC21E9626822F071

Expected Results:	Source disk is unchanged src compares equal to dst

Case DI-022 for SafeBack 2.18	
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-023 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-IDE destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Sun Nov 04 12:38:05 2001
PC:	Wimsey
Disks:	Source: DOS Drive 80 Physical Label F5 Destination: DOS Drive 81 Physical Label A7 Image media: DOS Drive 82 Physical Label none F5 is an IBM-DTLA-307020 with 40188960 sectors A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: F5 Host: Cadfael Operator: JRL OS: WindowsMe/Linux Date: Sat Aug 11 11:13:43 2001 DISKWIPE.EXE F5_SRC Cadfael 80 F5 /src X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE F5_SRC Cadfael 80 /before Disk hash = 83A0002816BBF089F8BE33C41C92C3B5A0F42A54
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-023 Wimsey 81 A7 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-023 Wimsey 80 /all /new_log /comment JRL(A7) Z:\ss\PARTAB.EXE DI-023 Wimsey 81 /all /new_log /comment JRL(A7) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-023 Wimsey 80 F5 81 A7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-023 Wimsey 80 /comment JRL(F5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-023

Log File Highlights:	Safeback log: DI-023/SB_023C.TXT
	      SafeBack 2.18 13Feb01 execution started on Nov 4, 2001 13:19.
	13:20:03 Menu selections:
	         Function: Copy
	         Direct access: No
	         Use XBIOS: Yes
	         Adjust partitions: No
	         Backfill on restore: No
	13:20:12 Copy from Local drive 0: to local drive 1:
	13:20:12 Insufficient destination file space projected.
	13:20:23 Copy of Local drive 0: to drive 1: begun on Nov 4, 2001 13:20
	13:20:23 Local SafeBack is running on DOS 6.30
	13:20:23 Partition table for drive 0:
	         Source drive 0:
	           Capacity........19624 MB
	           Cylinders.......2501
	           Heads...........255
	          Destination drive 1:
	           Capacity........19093 MB
	           Cylinders.......2434
	           Heads...........255
	14:32:24 Copy of drive 0: to drive 1: completed on Nov 4, 2001 14:32
	      SafeBack execution ended on Nov 4, 2001 14:33.
	= = = = Measurement Logs = = = =
	Sectors Compared 39102336
	Sectors Differ 0
	Diffs range
	Source (40188960) has 1086624 more sectors than destination (39102336)

Case DI-023 for SafeBack 2.18	
	Hash after test: 83A0002816BBF089F8BE33C41C92C3B5A0F42A54
Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-024 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-IDE destination disk and the source contains a FAT16 partition where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Tue Nov 06 13:56:18 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label none B8 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-024 Rumpole 81 B7 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16X-SS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001334529 0000/001/01 0330/063/63 06 Fat16
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-024 Rumpole 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-024 Rumpole 81 /all /new_log /comment JRL(B7) z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-024 Rumpole 80 B8 81 B7 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-024 Wimsey 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-024
Log File Highlights:	Source disk Drive 0x80, BIOS: Extensions Present Interrupt 13 bios 0786/063/63 (max cyl/hd values) Interrupt 13 ext 03148/016/63 (number of cyl/hd) 3173184 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16 2 X 001431360 001128960 0355/000/01 0634/063/63 05 extended 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended 5 S 000000063 000145089 0406/001/01 0441/063/63 06 Fat16 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 002560320 000064512 0635/000/01 0650/063/63 83 Linux 10 P 002761920 000411264 0685/000/01 0786/063/63 82 Linux swap Destination disk Drive 0x81, BIOS: Extensions Present Interrupt 13 bios 0786/063/63 (max cyl/hd values) Interrupt 13 ext 03148/016/63 (number of cyl/hd)

Case DI-024 for SafeBack 2.18	
	3173184 total number of sectors reported via interrupt 13 from the BIOS
	N Start LBA Length Start C/H/S End C/H/S boot Partition type
	1 P 000000063 001334529 0000/001/01 0330/063/63 06 Fat16
	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
	Safeback log: DI-024/SB_024C.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 6, 2001 14:49.
	The tape drive was not used.
	14:49:53 Menu selections:
	Function: Copy
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	14:50:06 Copy from Local drive C: to local drive D:
	14:50:11 Partition/Boot information saved to A:\PT.SPS.
	14:50:12 Copy of Local drive C: to drive D: begun on Nov 6, 2001 14:50
	14:50:12 Local SafeBack is running on DOS 6.30
	Source drive C:
	Capacity........600 MB
	Cylinders.......304
	Heads...........64
	Destination drive D:
	Capacity........652 MB
	Cylinders.......330
	Heads...........64
	14:57:18 Copy of drive C: to drive D: completed on Nov 6, 2001 14:57
	SafeBack execution ended on Nov 6, 2001 14:58.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 0
	Diffs range:
	Source (1229697) has 104832 fewer sectors than destination (1334529)
	Zero fill: 0
	Src Byte fill (B8): 0
	Dst Byte fill (B7): 104832
	Other fill: 0
	Other no fill: 0
	Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-025 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk
	to an XBIOS-IDE destination disk
	and the source contains a FAT32 partition
	where the source disk is smaller than the destination
	and sector fill is turned on
Tester Name:	JRL
Test Date:	Tue Dec 11 13:33:19 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label F1
	Destination: DOS Drive 81 Physical Label BB
	Image media: DOS Drive 82 Physical Label none
	F1 is a Quantum Sirooco1700A with 3335472 sectors
	BB is a QUANTUM FIREBALL ST3.2A with 6306048 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32
	Disk: F1
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Fri Nov 16 10:42:33 2001

Case DI-025 for SafeBack 2.18	
	cmd: Z:\ss\DISKWIPE.EXE F1 JudgeDee 80 F1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE F1 JudgeDee 80 /before /new_log Disk hash = 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-025 Cadfael 81 BB /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32X-SS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001334529 0000/001/01 0330/063/63 0B Fat32
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-025 Cadfael 80 /all /new_log /comment JRL(BB) Z:\ss\PARTAB.EXE DI-025 Cadfael 81 /all /new_log /comment JRL(BB) z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-025 Cadfael 80 F1 81 BB /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-025 Cadfael 80 /comment JRL(F1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-025

Log File
Highlights:
	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 0826/063/63 (max cyl/hd values)
	Interrupt 13 ext 03309/016/63 (number of cyl/hd)
	3335472 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 0B Fat32
	 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended
	 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	 5 S 000000063 000145089 0406/001/01 0441/063/63 0B Fat32
	 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux
	10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1023/063/63 (max cyl/hd values)
	Interrupt 13 ext 06256/016/63 (number of cyl/hd)
	6306048 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001334529 0000/001/01 0330/063/63 0B Fat32
	 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
	Safeback log: DI-025/SB_025C.TXT
	        SafeBack 2.18 13Feb01 execution started on Dec 11, 2001 14:58.
	14:58:48 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: Yes
	14:59:09 Copy from Local drive C: to local drive D:
	14:59:15 Partition/Boot information saved to A:\PT.SPS.
	14:59:17 Copy of Local drive C: to drive D: begun on Dec 11, 2001 14:59
	14:59:17 Local SafeBack is running on DOS 7.10
	            Source drive C:
	              Capacity........600 MB
	              Cylinders.......304
	              Heads...........64
	            Destination drive D:
	              Capacity........652 MB
	              Cylinders.......330
	              Heads...........64
	15:01:43 Copy of drive C: to drive D: completed on Dec 11, 2001 15:01
	        SafeBack execution ended on Dec 11, 2001 15:01.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 1
	Diffs range: 1

Case DI-025 for SafeBack 2.18	
	Source (1229697) has 104832 fewer sectors than destination (1334529) Zero fill: 0 Src Byte fill (F1): 0 Dst Byte fill (BB): 104832 Other fill: 0 Other no fill: 0 Hash after test: 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	FAT32 anomaly, Backfill anomaly
Analysis:	Expected results not achieved

Case DI-027 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-IDE destination disk and the source contains a FAT32 partition where the source disk is the same size as the destination Introduce a read error from the source.
Tester Name:	JRL
Test Date:	Sun Jun 16 12:37:34 2002
PC:	Wimsey
Disks:	Source: DOS Drive 80 Physical Label A5 Destination: DOS Drive 81 Physical Label A6 Image media: DOS Drive 80 Physical Label none A5 is a WDC WD200BB-00AUA1 with 39102336 sectors A6 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Fat32 only Disk: A5 Host: JudgeDee Operator: JRL OS: NoOs Options: none Date: Mon Apr 15 14:35:04 2002 cmd: Z:\ss\DISKWIPE.EXE A5 JudgeDee 80 A5 /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt No OS loaded, FAT32 partition only cmd: Z:\ss\DISKHASH.EXE A5 JudgeDee 80 /before /new_log Disk hash = 3DE5C01B5BB337EA3E6CF9BC25EB844F5D00FD14
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-027 Wimsey 81 A6 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32X-ES.txt See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 80 23 3 15 2 10 >> A:\err-027.txt Z:\ss\baddisk 80 23 3 15 10 10 >> A:\err-027.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00002 from disk 00080 at address 00023/00003/00015 return code 00010 on command 00010 from disk 00080 at address 00023/00003/00015
Execute:	z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-027 Wimsey 80 A5 81 A6 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-027 JudgeDee 80 /comment A5(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-027
Log File Highlights:	Source disk Drive 0x80, BIOS: Extensions Present Interrupt 13 bios 1023/254/63 (max cyl/hd values) Interrupt 13 ext 16383/016/63 (number of cyl/hd) 39102336 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 0B Fat32 2 X 001429785 037061955 0089/000/01 1023/254/63 0F extended 3 S 000000063 000208782 0089/001/01 0101/254/63 83 Linux

Case DI-027 for SafeBack 2.18	

	`  4 x 000208845 000144585 0102/000/01 0110/254/63     05 extended`
	 `  5 S 000000063 000144522 0102/001/01 0110/254/63     0B Fat32`
	 `  6 x 000771120 000192780 0137/000/01 0148/254/63     05 extended`
	 `  7 S 000000063 000192717 0137/001/01 0148/254/63     16 other`
	 `  8 S 000000000 000000000 0000/000/00 0000/000/00     00 empty entry`
	 `  9 P 038491740 000064260 1023/000/01 1023/254/63     83 Linux`
	 ` 10 P 038684520 000417690 1023/000/01 1023/254/63     82 Linux swap`
	 `Destination disk Drive 0x81, BIOS: Extensions Present`
	 `Interrupt 13  bios  1023/254/63 (max cyl/hd values)`
	 `Interrupt 13  ext   16383/016/63 (number of cyl/hd)`
	 `39102336 total number of sectors reported via interrupt 13 from the BIOS`
	 ` N   Start LBA Length    Start C/H/S End C/H/S   boot Partition type`
	 ` 1 P 000000063 001236942 0000/001/01 0076/254/63     0B Fat32`
	 ` 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`
	 `Safeback log: DI-027/SB_027C.TXT`
	 `        SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 15:00.`
	 `15:01:01  Menu selections:`
	 `            Function:          Copy`
	 `            Direct access:     No`
	 `            Use XBIOS:         Auto`
	 `            Adjust partitions: Auto`
	 `            Backfill on restore:  Yes`
	 `15:01:15  Copy from Local drive C: to local drive D:`
	 `15:01:20  Partition/Boot information saved to A:\PT.SPS.`
	 `15:01:21  Copy of Local drive C: to drive D: begun on Jun 16, 2002 15:01`
	 `15:01:21  Local SafeBack is running on DOS 7.10`
	 `            Source drive C:`
	 `              Capacity........604 MB`
	 `              Cylinders.......76`
	 `              Heads...........255`
	 `            Destination drive D:`
	 `              Capacity........604 MB`
	 `              Cylinders.......76`
	 `              Heads...........255`
	 `15:02:11  While reading drive C: a bad address mark error (status 02)`
	 `occurred:`
	 `            at relative sector 369635 (Cylinder 23, Head 2, Sector 15)`
	 `15:03:55  Copy of drive C: to drive D: completed on Jun 16, 2002 15:03`
	 `            SafeBack execution ended on Jun 16, 2002 15:04.`
	 `= = = = Measurement Logs = = = =`
	 `Sectors Compared 1236942`
	 `Sectors Differ 2`
	 `Diffs range:  1, 369635`
	 `Hash after test: 3DE5C01B5BB337EA3E6CF9BC25EB844F5D00FD14`

Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-030 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-IDE destination disk and the source contains a FAT32 partition where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Thu Dec 13 15:59:40 2001
PC:	Wimsey
Disks:	Source: DOS Drive 80 Physical Label F1 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label none F1 is a Quantum Sirooco1700A with 3335472 sectors B7 is a WDC AC21600H with 3173184 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk	Linux EXT2 & Fat32

Case DI-030 for SafeBack 2.18	
setup:	Disk: F1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Fri Nov 16 10:42:33 2001 cmd: Z:\ss\DISKWIPE.EXE F1 JudgeDee 80 F1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE F1 JudgeDee 80 /before /new_log Disk hash = 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-030 Wimsey 81 B7 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32X-BS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001128897 0000/001/01 0279/063/63 0B Fat32
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-030 Wimsey 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-030 Wimsey 81 /all /new_log /comment JRL(B7) z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-030 Wimsey 80 F1 81 B7 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-030 Wimsey 80 /comment JRL(F1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-030

Log File
Highlights:
	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 0826/063/63 (max cyl/hd values)
	Interrupt 13 ext 03309/016/63 (number of cyl/hd)
	3335472 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 0B Fat32
	 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended
	 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	 5 S 000000063 000145089 0406/001/01 0441/063/63 0B Fat32
	 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux
	10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 0786/063/63 (max cyl/hd values)
	Interrupt 13 ext 03148/016/63 (number of cyl/hd)
	3173184 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001128897 0000/001/01 0279/063/63 0B Fat32
	 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
	Safeback log: DI-030/SB_030C.TXT
	        SafeBack 2.18 13Feb01 execution started on Dec 13, 2001 16:27.
	16:27:35 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: No
	16:27:52 Copy from Local drive C: to local drive D:
	16:27:52 Insufficient destination file space projected.
	16:28:02 Partition/Boot information saved to A:\PT.SPS.
	16:28:02 Copy of Local drive C: to drive D: begun on Dec 13, 2001 16:28
	16:28:02 Local SafeBack is running on DOS 7.10
	            Source drive C:
	              Capacity........600 MB
	              Cylinders.......304
	              Heads...........64
	            Destination drive D:
	              Capacity........551 MB
	              Cylinders.......279

Case DI-030 for SafeBack 2.18	
	Heads..........64 16:31:02 Copy of drive C: to drive D: completed on Dec 13, 2001 16:31 SafeBack execution ended on Dec 13, 2001 16:31. = = = = Measurement Logs = = = = Sectors Compared 1128897 Sectors Differ 1 Diffs range: 1 Source (1229697) has 100800 more sectors than destination (1128897) Hash after test: 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-031 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Thu Oct 25 13:28:32 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label E3 Destination: DOS Drive 81 Physical Label E8 Image media: DOS Drive 82 Physical Label none E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E8 is a SEAGATE ST318404LC with 35843670 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-031 Rumpole 81 E8 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-031 Rumpole 80 /all /new_log /comment JRL(E3) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-031 Rumpole 80 E3 81 E8 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-031 Rumpole 80 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-031

Log File
Highlights:
	Safeback log: DI-031/SB_031C.TXT
	          SafeBack 2.18 13Feb01 execution started on Oct 25, 2001 13:43.
	          The tape drive was not used.
	13:43:40 Menu selections:
	               Function: Copy
	               Direct access: No
	               Use XBIOS: Yes
	               Adjust partitions: No
	               Backfill on restore: No
	13:43:48 Copy from Local drive 0: to local drive 1:
	13:43:52 Copy of Local drive 0: to drive 1: begun on Oct 25, 2001 13:43
	13:43:52 Local SafeBack is running on DOS 6.30
	13:43:52 Partition table for drive 0:
	               Source drive 0:
	                 Capacity........8759 MB
	                 Cylinders.......1116

Case DI-031 for SafeBack 2.18	
	Heads..........255
	Destination drive 1:
	Capacity........17502 MB
	Cylinders.......2231
	Heads..........255
	13:58:39 Copy of drive 0: to drive 1: completed on Oct 25, 2001 13:58
	SafeBack execution ended on Oct 25, 2001 14:18.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 0
	Diffs range
	Source (17938985) has 17904685 fewer sectors than destination (35843670)
	Zero fill: 17904685
	Src Byte fill (E3): 0
	Dst Byte fill (E8): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-032 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk where the source disk is smaller than the destination and sector fill is turned on
Tester Name:	JRL
Test Date:	Fri Oct 26 09:10:13 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label E3 Destination: DOS Drive 81 Physical Label E8 Image media: DOS Drive 82 Physical Label none E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E8 is a SEAGATE ST318404LC with 35843670 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-032 Rumpole 81 E8 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-032 Rumpole 80 /all /new_log /comment JRL(E3) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-032 Rumpole 80 E3 81 E8 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-032 Rumpole 80 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-032

Log File Highlights:	Safeback log: DI-032/SB_032C.TXT
	        SafeBack 2.18 13Feb01 execution started on Oct 26, 2001 09:29.
	        The tape drive was not used.
	09:29:57 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: Yes

Case DI-032 for SafeBack 2.18	
	Adjust partitions: No
	Backfill on restore: Yes
	09:30:28 Copy from Local drive 0: to local drive 1:
	09:30:33 Copy of Local drive 0: to drive 1: begun on Oct 26, 2001 09:30
	09:30:33 Local SafeBack is running on DOS 6.30
	09:30:33 Partition table for drive 0:
	Source drive 0:
	Capacity........8759 MB
	Cylinders.......1116
	Heads...........255
	Destination drive 1:
	Capacity........17502 MB
	Cylinders.......2231
	Heads...........255
	09:45:13 Copy of drive 0: to drive 1: completed on Oct 26, 2001 09:45
	SafeBack execution ended on Oct 26, 2001 09:46.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 0
	Diffs range
	Source (17938985) has 17904685 fewer sectors than destination (35843670)
	Zero fill: 17904685
	Src Byte fill (E3): 0
	Dst Byte fill (E8): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-033 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-SCSI source disk
	to an XBIOS-SCSI destination disk
	where the source disk is the same size as the destination
	Introduce a read error from the source.
Tester Name:	KBR
Test Date:	Wed Nov 14 06:00:35 2001
PC:	marple
Disks:	Source: DOS Drive 80 Physical Label C0
	Destination: DOS Drive 81 Physical Label C1
	Image media: DOS Drive 82 Physical Label none
	C0 is a SEAGATE ST39204LC with 17921835 sectors
	C1 is a SEAGATE ST39204LC with 17921835 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Diskwipe only, no OS
	Disk: C0
	Host: Marple
	Operator: KBR
	OS: NoOs
	Options: none
	Date: Mon Nov 05 08:29:33 2001
	cmd: Z:\ss\DISKWIPE.EXE C0 Marple 80 C0 /src /new_log
	No partitions defined
	No OS loaded
	cmd: Z:\ss\DISKHASH.EXE C0 Marple 80 /before /new_log
	Disk hash = 469216C0D380A3E415690ADA72F560EAA71693F0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-033 marple 81 C1 /noask /dst /new_log /comment KBR
Error Setup:	Z:\ss\badx13 80 42 10 699 > a:\err-033.txt
	Version 3.1 Created 10/11/01 at 12:41:45
	badx13 compiled on 10/11/01 at 12:43:21
	Return error code 10 for X13 command 42 from drive 80 at LBA sector 699
Execute:	Z:\ss\PARTAB.EXE DI-033 marple 80 /all /new_log /comment KBR(C1)

Case DI-033 for SafeBack 2.18	
	Z:\ss\PARTAB.EXE DI-033 marple 81 /all /new_log /comment KBR(C1) Z:\ss\DISKCMP.EXE DI-033 marple 80 C0 81 C1 /new_log /comment KBR Z:\ss\DISKHASH.EXE DI-033 marple 80 /comment KBR(C0) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-033

Log File Highlights:	Safeback log: DI-033/DI-033SB.TXT
	     SafeBack 2.18 13Feb01 execution started on Nov 14, 2001 06:52.
	06:52:57 Menu selections:
	        Function: Copy
	        Direct access: No
	        Use XBIOS: Yes
	        Adjust partitions: No
	        Backfill on restore: No
	06:53:02 Copy from Local drive 0: to local drive 1:
	06:53:12 Copy of Local drive 0: to drive 1: begun on Nov 14, 2001 06:53
	06:53:12 Local SafeBack is running on DOS 6.30
	        Source drive 0:
	          Capacity........8751 MB
	          Cylinders.......1115
	          Heads...........255
	        Destination drive 1:
	          Capacity........8751 MB
	          Cylinders.......1115
	          Heads...........255
	06:53:13 While reading drive 0: a sector flagged bad error (status 0a)
	occurred:
	        at relative sector 699 (Cylinder 0, Head 11, Sector 7)
	07:07:51 Copy of drive 0: to drive 1: completed on Nov 14, 2001 07:07
	        SafeBack execution ended on Nov 14, 2001 08:46.
	= = = = Measurement Logs = = = =
	Sectors Compared 17921835
	Sectors Differ 1
	Diffs range 699
	Hash after test: 469216C0D380A3E415690ADA72F560EAA71693F0

Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-034 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk where the source disk is the same size as the destination Introduce a write error to the destination.
Tester Name:	KBR
Test Date:	Thu Nov 08 13:03:44 2001
PC:	marple
Disks:	Source: DOS Drive 80 Physical Label C0 Destination: DOS Drive 81 Physical Label C1 Image media: DOS Drive 82 Physical Label none C0 is a SEAGATE ST39204LC with 17921835 sectors C1 is a SEAGATE ST39204LC with 17921835 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Diskwipe only, no OS Disk: C0 Host: Marple Operator: KBR OS: NoOs Options: none Date: Mon Nov 05 08:29:33 2001 cmd: Z:\ss\DISKWIPE.EXE C0 Marple 80 C0 /src /new_log No partitions defined No OS loaded cmd: Z:\ss\DISKHASH.EXE C0 Marple 80 /before /new_log

Case DI-034 for SafeBack 2.18	
	Disk hash = 469216C0D380A3E415690ADA72F560EAA71693F0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-034 marple 81 C1 /noask /dst /new_log /comment KBR
Error Setup:	Z:\ss\badx13 81 43 10 90 > a:\err-034.txt Version 3.1 Created 10/11/01 at 12:41:45 badx13 compiled on 10/11/01 at 12:43:21 Return error code 10 for X13 command 43 from drive 81 at LBA sector 90
Execute:	Z:\ss\PARTAB.EXE DI-034 marple 80 /all /new_log /comment KBR(C1) Z:\ss\PARTAB.EXE DI-034 marple 81 /all /new_log /comment KBR(C1) Z:\ss\DISKCMP.EXE DI-034 marple 80 C0 81 C1 /new_log /comment KBR Z:\ss\DISKHASH.EXE DI-034 C0 80 /comment KBR(C0) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-034

Log File Highlights:	Safeback log: DI-034/DI034SB.TXT
	     SafeBack 2.18 13Feb01 execution started on Nov 8, 2001 13:34.
	13:34:14 Menu selections:
	       Function: Copy
	       Direct access: No
	       Use XBIOS: Yes
	       Adjust partitions: No
	       Backfill on restore: No
	13:34:16 Copy from Local drive 0: to local drive 1:
	13:34:21 Copy of Local drive 0: to drive 1: begun on Nov 8, 2001 13:34
	13:34:21 Local SafeBack is running on DOS 6.30
	       Source drive 0:
	         Capacity........8751 MB
	         Cylinders.......1115
	         Heads...........255
	       Destination drive 1:
	         Capacity........8751 MB
	         Cylinders.......1115
	         Heads...........255
	13:34:21 While writing drive 1:, a sector flagged bad error (status 0a) occurred
	       at relative sector 90 (Cylinder 0, Head 1, Sector 28)
	13:48:57 Copy of drive 0: to drive 1: completed on Nov 8, 2001 13:48
	       SafeBack execution ended on Nov 9, 2001 07:03.
	= = = = Measurement Logs = = = =
	Sectors Compared 17921835
	Sectors Differ 29
	Diffs range 90-118
	Hash after test: 469216C0D380A3E415690ADA72F560EAA71693F0

Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-035 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk where the source disk is the same size as the destination
Tester Name:	KBR
Test Date:	Tue Nov 06 07:23:08 2001
PC:	marple
Disks:	Source: DOS Drive 80 Physical Label C0 Destination: DOS Drive 81 Physical Label C1 Image media: DOS Drive 82 Physical Label none C0 is a SEAGATE ST39204LC with 17921835 sectors C1 is a SEAGATE ST39204LC with 17921835 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Diskwipe only, no OS Disk: C0 Host: Marple Operator: KBR OS: NoOs

Case DI-035 for SafeBack 2.18	
	Options: none Date: Mon Nov 05 08:29:33 2001 cmd: Z:\ss\DISKWIPE.EXE C0 Marple 80 C0 /src /new_log No partitions defined No OS loaded cmd: Z:\ss\DISKHASH.EXE C0 Marple 80 /before /new_log Disk hash = 469216C0D380A3E415690ADA72F560EAA71693F0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-035 marple 81 C1 /noask /dst /new_log /comment KBR
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-035 marple 80 /all /new_log /comment KBR(C1) Z:\ss\PARTAB.EXE DI-035 marple 81 /all /new_log /comment KBR(C1) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-035 marple 80 C0 81 C1 /new_log /comment KBR Z:\ss\DISKHASH.EXE DI-035 Marple 80 /comment KBR(C0) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-035

Log File Highlights:	Safeback log: DI-035/SB_035C.TXT
	     SafeBack 2.18 13Feb01 execution started on Nov 6, 2001 07:44.
	07:45:10 Menu selections:
	     Function: Copy
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	07:45:24 Copy from Local drive 0: to local drive 1:
	07:45:34 Copy of Local drive 0: to drive 1: begun on Nov 6, 2001 07:45
	07:45:34 Local SafeBack is running on DOS 6.30
	     Source drive 0:
	      Capacity........8751 MB
	      Cylinders.......1115
	      Heads...........255
	     Destination drive 1:
	      Capacity........8751 MB
	      Cylinders.......1115
	      Heads...........255
	07:59:52 Copy of drive 0: to drive 1: completed on Nov 6, 2001 07:59
	     SafeBack execution ended on Nov 6, 2001 08:34.
	= = = = Measurement Logs = = = =
	Sectors Compared 17921835
	Sectors Differ 0
	Diffs range
	Hash after test: 469216C0D380A3E415690ADA72F560EAA71693F0

Expected Results:	Source disk is unchanged src compares equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-036 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Tue Oct 16 16:05:41 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label E3 Destination: DOS Drive 81 Physical Label EA Image media: DOS Drive 82 Physical Label none E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors EA is a SEAGATE ST39204LC with 17921835 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael

Case DI-036 for SafeBack 2.18	
	Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-036 Cadfael 81 EA /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-036 Cadfael 80 /all /new_log /comment JRL(E3) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-036 Cadfael 80 E3 81 EA /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-036 cadfael 80 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-036

Log File Highlights:	Safeback log: DI-036/SB_036C.TXT
	      SafeBack 2.18 13Feb01 execution started on Oct 16, 2001 16:14.
	16:15:09 Menu selections:
	     Function: Copy
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	16:15:28 Copy from Local drive 0: to local drive 1:
	16:15:28 Insufficient destination file space projected.
	16:15:38 Copy of Local drive 0: to drive 1: begun on Oct 16, 2001 16:15
	16:15:38 Local SafeBack is running on DOS 6.30
	16:15:38 Partition table for drive 0:
	     Source drive 0:
	      Capacity........8759 MB
	      Cylinders.......1116
	      Heads...........255
	     Destination drive 1:
	      Capacity........8751 MB
	      Cylinders.......1115
	      Heads...........255
	16:23:21 Copy of drive 0: to drive 1: completed on Oct 16, 2001 16:23
	      SafeBack execution ended on Oct 16, 2001 16:57.
	= = = = Measurement Logs = = = =
	Sectors Compared 17921835
	Sectors Differ 0
	Diffs range
	Source (17938985) has 17150 more sectors than destination (17921835)
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0

Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-040 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk and the source contains a FAT16 partition where the source disk is the same size as the destination Introduce a read error from the source.
Tester Name:	JRL
Test Date:	Sun Jun 16 16:48:12 2002
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label E3 Destination: DOS Drive 81 Physical Label E2 Image media: DOS Drive 80 Physical Label none E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors

Case DI-040 for SafeBack 2.18	
	E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-040 Cadfael 81 E2 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16X-ES.txt See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 80 66 2 10 2 10 >> A:\err-040.txt Z:\ss\baddisk 80 66 2 10 10 10 >> A:\err-040.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00002 from disk 00080 at address 00066/00002/00010 return code 00010 on command 00010 from disk 00080 at address 00066/00002/00010
Execute:	z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-040 Cadfael 80 E3 81 E2 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-040 Cadfael 80 /comment E3(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-040

Log File
Highlights:
	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 06 Fat16
	 2 X 002249100 007181055 0140/000/01 0586/254/63 05 extended
	 3 S 000000063 000208782 0140/001/01 0152/254/63 83 Linux
	 4 x 000208845 000144585 0153/000/01 0161/254/63 05 extended
	 5 S 000000063 000144522 0153/001/01 0161/254/63 06 Fat16
	 6 x 004450005 000192780 0417/000/01 0428/254/63 05 extended
	 7 S 000000063 000192717 0417/001/01 0428/254/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 009430155 006152895 0587/000/01 0969/254/63 83 Linux
	10 P 017510850 000417690 1023/000/01 1023/254/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 06 Fat16
	 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
	Safeback log: DI-040/SB_040C.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 18:28.
	18:28:36 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	18:28:51 Copy from Local drive C: to local drive D:
	18:28:57 Partition/Boot information saved to A:\PT.SPS.
	18:28:58 Copy of Local drive C: to drive D: begun on Jun 16, 2002 18:28
	18:28:58 Local SafeBack is running on DOS 7.10

Case DI-040 for SafeBack 2.18	
	Source drive C:
	Capacity........604 MB
	Cylinders.......76
	Heads...........255
	Destination drive D:
	Capacity.......604 MB
	Cylinders.......76
	Heads...........255
	18:29:12 While reading drive C: a bad address mark error (status 02) occurred:
	at relative sector 1060362 (Cylinder 66, Head 1, Sector 10)
	18:29:15 Copy of drive C: to drive D: completed on Jun 16, 2002 18:29
	SafeBack execution ended on Jun 16, 2002 18:29.
	= = = = Measurement Logs = = = =
	Sectors Compared 1236942
	Sectors Differ 1
	Diffs range: 1060362
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-041 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk and the source contains a FAT32 partition where the source disk is the same size as the destination Introduce a write error to the destination.
Tester Name:	JRL
Test Date:	Sun Jun 16 12:26:26 2002
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label E4 Destination: DOS Drive 81 Physical Label E8 Image media: DOS Drive 80 Physical Label none E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E8 is a SEAGATE ST318404LC with 35843670 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32 Disk: E4 Host: JudgeDee Operator: JRL OS: Windows 2000/NT Date: Sat Jul 21 16:58:28 2001 DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000 source disk X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-041 Cadfael 81 E8 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32X-ES.txt See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 81 32 3 5 3 10 >> A:\err-041.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00003 from disk 00081 at address 00032/00003/00005
Execute:	z:\sb\master (copy) Z:\ss\PARTCMP.EXE DI-041 Cadfael 80 E4 81 E8 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-041 Cadfael 80 /comment E4(JRL) /new_log /after
Log files	test-archive/sb/sb-2.18/DI-041

Case DI-041 for SafeBack 2.18	
loc:	

Log File Highlights:	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 006152832 0000/001/01 0382/254/63 Boot 0B Fat32
	 2 X 008193150 009735390 0510/000/01 1023/254/63 0F extended
	 3 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 4 x 002056320 001237005 0638/000/01 0714/254/63 05 extended
	 5 S 000000063 001236942 0638/001/01 0714/254/63 07 NTFS
	 6 x 005349645 001638630 0843/000/01 0944/254/63 05 extended
	 7 S 000000063 001638567 0843/001/01 0944/254/63 17 other
	 8 x 008498385 001237005 1023/000/01 1023/254/63 05 extended
	 9 S 000000063 001236942 1023/001/01 1023/254/63 1B other
	10 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	11 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	12 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	35843670 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 006152832 0000/001/01 0382/254/63 0B Fat32
	 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
	Safeback log: DI-041/SB_041C.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 13:07.
	13:07:24 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	13:07:32 Copy from Local drive C: to local drive D:
	13:07:36 Partition/Boot information saved to A:\PT.SPS.
	13:07:37 Copy of Local drive C: to drive D: begun on Jun 16, 2002 13:07
	13:07:37 Local SafeBack is running on DOS 7.10
	            Source drive C:
	              Capacity........3004 MB
	              Cylinders.......382
	              Heads...........255
	            Destination drive D:
	              Capacity........3004 MB
	              Cylinders.......382
	              Heads...........255
	13:07:49 While writing drive D:, a bad address mark error (status 02) occurred
	            at relative sector 514210 (Cylinder 32, Head 2, Sector 5)
	13:09:49 Copy of drive C: to drive D: completed on Jun 16, 2002 13:09
	            SafeBack execution ended on Jun 16, 2002 13:21.
	= = = = Measurement Logs = = = =
	Sectors Compared 6152832
	Sectors Differ 109
	Diffs range: 1, 514210-514317
	Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF

Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-044 for SafeBack 2.18	
Case Summary:	Copy a direct access IDE source disk to a direct access IDE destination disk where the source disk is smaller than the destination
Tester Name:	JRL

Case DI-044 for SafeBack 2.18	
Test Date:	Tue Oct 23 14:19:46 2001
PC:	Beta4
Disks:	Source: DOS Drive 80 Physical Label B5 Destination: DOS Drive 81 Physical Label DB Image media: DOS Drive 82 Physical Label none B5 is a WDC AC21600H with 3173184 sectors DB is a Fujitsu MPE3064AT with 12672450 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B5 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Mon Oct 15 11:18:11 2001 cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log Disk hash = BD4140E6924156E1870E009837 01405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-044 Beta4 81 DB /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-044 Beta4 80 /all /new_log /comment JRL(B5) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-044 Beta4 80 B5 81 DB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-044 beta4 80 /comment JRL(B5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-044

Log File
Highlights:
	Safeback log: DI-044/SB_044C.TXT
	        SafeBack 2.18 13Feb01 execution started on Oct 23, 2001 14:35.
	14:36:19 Menu selections:
	                Function: Copy
	                Direct access: Yes
	                Use XBIOS: Auto
	                Adjust partitions: No
	                Backfill on restore: No
	14:36:55 Copy from Local drive 0: to local drive 1:
	14:37:00 Copy of Local drive 0: to drive 1: begun on Oct 23, 2001 14:37
	14:37:00 Local SafeBack is running on DOS 6.30
	14:37:00 Partition table for drive 0:
	            Source drive 0:
	              Capacity........1549 MB
	              Cylinders.......3148
	              Heads...........16
	              Model: WDC AC21600H
	              Serial Number: WD-WM3364967067
	              Firmware version: 24.09P07
	              IDE controller port with LBA direct drive access used.
	            Destination drive 1:
	              Capacity........6188 MB
	              Cylinders.......13410
	              Heads...........15
	              Model: FUJITSU MPE3064AT
	              Serial Number: 05294480
	              Firmware version: ED-03-04
	              IDE controller port with LBA direct drive access used.
	15:02:09 Copy of drive 0: to drive 1: completed on Oct 23, 2001 15:02
	            SafeBack execution ended on Oct 23, 2001 15:11.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Source (3173184) has 9499266 fewer sectors than destination (12672450)
	Zero fill: 9499266
	Src Byte fill (B5): 0

Case DI-044 for SafeBack 2.18	
	Dst Byte fill (DB): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: BD4140E6924156E1870E00983701405645359A00
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-045 for SafeBack 2.18	
Case Summary:	Copy a direct access IDE source disk
	to a direct access IDE destination disk
	where the source disk is smaller than the destination
	and sector fill is turned on
Tester Name:	JRL
Test Date:	Thu Oct 25 12:49:49 2001
PC:	Beta4
Disks:	Source: DOS Drive 80 Physical Label B5
	Destination: DOS Drive 81 Physical Label D7
	Image media: DOS Drive 82 Physical Label none
	B5 is a WDC AC21600H with 3173184 sectors
	D7 is a Quantum Sirooco1700A with 3335472 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16
	Disk: B5
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Mon Oct 15 11:18:11 2001
	cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\nex-src.txt
	Load Operating System to Source disk
	cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log
	Disk hash = BD4140E6924156E1870E00983701405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-045 Beta4 81 D7 /noask /dst /new_log /comment JRL
	No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-045 Beta4 80 /all /new_log /comment JRL(B5)
	z:\sb\master (copy)
	Z:\ss\DISKCMP.EXE DI-045 Beta4 80 B5 81 D7 /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-045 Beta4 80 /comment JRL(B5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-045
Log File Highlights:	Safeback log: DI-045/SB_045C.TXT
	SafeBack 2.18 13Feb01 execution started on Oct 25, 2001 13:34.
	13:34:36 Menu selections:
	Function: Copy
	Direct access: Yes
	Use XBIOS: Auto
	Adjust partitions: No
	Backfill on restore: Yes
	13:35:03 Copy from Local drive 0: to local drive 1:
	13:35:08 Copy of Local drive 0: to drive 1: begun on Oct 25, 2001 13:35
	13:35:08 Local SafeBack is running on DOS 6.30
	13:35:08 Partition table for drive 0:
	Source drive 0:
	Capacity........1549 MB
	Cylinders.......3148
	Heads...........16
	Model: WDC AC21600H
	Serial Number: WD-WM3364967067
	Firmware version: 24.09P07
	IDE controller port with LBA direct drive access used.

Case DI-045 for SafeBack 2.18	

	Destination drive 1:
	     Capacity........1629 MB
	     Cylinders.......3309
	     Heads...........16
	     Model: QUANTUM SIROCCO1700A
	     Serial Number: 111615915652
	     Firmware version: A01.0O00
	     IDE controller port with LBA direct drive access used.
	13:46:24 Copy of drive 0: to drive 1: completed on Oct 25, 2001 13:46
	     SafeBack execution ended on Oct 25, 2001 15:16.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Source (3173184) has 162288 fewer sectors than destination (3335472)
	Zero fill: 162288
	Src Byte fill (B5): 0
	Dst Byte fill (D7): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: BD4140E6924156E1870E00983701405645359A00

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-046 for SafeBack 2.18	
Case Summary:	Copy a direct access IDE source disk to a direct access IDE destination disk where the source disk is smaller than the destination and cylinder adjustment is turned on
Tester Name:	JRL
Test Date:	Thu Oct 25 15:39:42 2001
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1 Destination: DOS Drive 81 Physical Label DB Image media: DOS Drive 82 Physical Label none A1 is a Quantum Sirooco1700A with 3335472 sectors DB is a Fujitsu MPE3064AT with 12672450 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: A1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Tue Oct 16 11:24:16 2001 cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-046 Beta3 81 DB /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-046 Beta3 80 /all /new_log /comment JRL(A1) z:\sb\master (copy) Z:\ss\ADJCMP.EXE DI-046 Beta3 80 A1 81 DB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-046 Beta3 80 /comment JRL(A1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-046
Log File Highlights:	Source Disk Drive 0x80, BIOS: Legacy Interrupt 13 bios 0825/063/63 (max cyl/hd values) Interrupt 13 ext 00826/064/63 (number of cyl/hd)

```
3330432 total number of sectors reported via interrupt 13 from the BIOS
  Start LBA Length     Start C/H/S End C/H/S   boot Partition type
P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16
X 001431360 001290240 0355/000/01 0674/063/63      05 extended
S 000000063 000205569 0355/001/01 0405/063/63      83 Linux
x 000205632 000145152 0406/000/01 0441/063/63      05 extended
S 000000063 000145089 0406/001/01 0441/063/63      06 Fat16
x 000762048 000185472 0544/000/01 0589/063/63      05 extended
S 000000063 000185409 0544/001/01 0589/063/63      16 other
S 000000000 000000000 0000/000/00 0000/000/00      00 empty entry
P 002721600 000064512 0675/000/01 0690/063/63      83 Linux
P 002923200 000411264 0725/000/01 0826/063/63      82 Linux swap
Destination Disk Drive 0x81, BIOS: Legacy
Interrupt 13  bios  0786/254/63 (max cyl/hd values)
Interrupt 13  ext   00787/255/63 (number of cyl/hd)
12643155 total number of sectors reported via interrupt 13 from the BIOS
  Start LBA Length     Start C/H/S End C/H/S   boot Partition type
P 000000063 001230327 0000/001/01 1023/014/63 Boot 06 Fat16
X 001431990 001291500 1023/014/63 1023/014/63      05 extended
S 000000063 000205632 1023/014/63 1023/014/63      83 Linux
x 000205695 000145530 1023/014/63 1023/014/63      05 extended
S 000000063 000145467 1023/014/63 1023/014/63      06 Fat16
x 000762489 000185976 1023/014/63 1023/014/63      05 extended
S 000000063 000185913 1023/014/63 1023/014/63      16 other
S 000000000 000000000 0000/000/00 0000/000/00      00 empty entry
P 002723490 000065205 1023/014/63 1023/014/63      83 Linux
P 002925783 000411957 1023/014/63 1023/014/63      82 Linux swap
Safeback log: DI-046/SB_046C.TXT
        SafeBack 2.18 13Feb01 execution started on Oct 25, 2001 15:57.
15:57:42  Menu selections:
          Function:           Copy
          Direct access:      Yes
          Use XBIOS:          Auto
          Adjust partitions:  Auto
          Backfill on restore:  No
15:58:11  Copy from Local drive 0: to local drive 1:
15:58:18  Copy of Local drive 0: to drive 1: begun on Oct 25, 2001 15:58
15:58:18  Local SafeBack is running on DOS 6.30
15:58:18  Partition table for drive 0:
          Source drive 0:
            Capacity........1629 MB
            Cylinders.......3309
            Heads...........16
            Model: QUANTUM SIROCCO1700A
            Serial Number: 111610113604
            Firmware version: A01.0O00
            IDE controller port with LBA direct drive access used.
          Destination drive 1:
            Capacity........6188 MB
            Cylinders.......13410
            Heads...........15
            Model: FUJITSU MPE3064AT
            Serial Number:         05294480
            Firmware version: ED-03-04
            IDE controller port with LBA direct drive access used.
16:05:10  SafeBack has set the apparent geometry of the source drive to
827
          cylinders, 64 heads and 63 sectors/head after examining the
          master boot record.
16:16:53  Partition table for drive 1:
16:16:54  Copy of drive 0: to drive 1: completed on Oct 25, 2001 16:16
          SafeBack execution ended on Oct 25, 2001 16:22.
= = = = Measurement Logs = = = =
Cylinder adjustment/alignment Summary
Boot tracks  4           252 diffs          4
Partitions   6       2241540 diffs          9
Unallocated  5       1093680 diffs          1
Total src sectors    3335472
Partition excess       2961 zero       2856 non-zero        105
Disk excess         9334017 zero        303 non-zero   9333714
```

Case DI-046 for SafeBack 2.18	
	Total dst sectors 12672450
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst
Actual Results:	Cylinder Alignment anomaly
Analysis:	Expected results not achieved

Case DI-047 for SafeBack 2.18	
Case Summary:	Copy a direct access IDE source disk
	to a direct access IDE destination disk
	where the source disk is smaller than the destination
	and sector fill is turned on
	and cylinder adjustment is turned on
Tester Name:	JRL
Test Date:	Fri Oct 26 08:27:33 2001
PC:	Beta4
Disks:	Source: DOS Drive 80 Physical Label B5
	Destination: DOS Drive 81 Physical Label DB
	Image media: DOS Drive 82 Physical Label none
	B5 is a WDC AC21600H with 3173184 sectors
	DB is a Fujitsu MPE3064AT with 12672450 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16
	Disk: B5
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Mon Oct 15 11:18:11 2001
	cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\nex-src.txt
	Load Operating System to Source disk
	cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log
	Disk hash = BD4140E6924156E1870E00983701405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-047 Beta4 81 DB /noask /dst /new_log /comment JRL
	No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-047 Beta4 80 /all /new_log /comment JRL(B5)
	z:\sb\master (copy)
	Z:\ss\ADJCMP.EXE DI-047 Beta4 80 B5 81 DB /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-047 Beta4 80 /comment JRL(B5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-047
Log File Highlights:	Source Disk Drive 0x80, BIOS: Legacy
	Interrupt 13 bios 0785/063/63 (max cyl/hd values)
	Interrupt 13 ext 00786/064/63 (number of cyl/hd)
	3169152 total number of sectors reported via interrupt 13 from the BIOS
	Start LBA Length Start C/H/S End C/H/S boot Partition type
	P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16
	X 001431360 001128960 0355/000/01 0634/063/63 05 extended
	S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	S 000000063 000145089 0406/001/01 0441/063/63 06 Fat16
	x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	S 000000063 000185409 0544/001/01 0589/063/63 16 other
	S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	P 002560320 000064512 0635/000/01 0650/063/63 83 Linux
	P 002761920 000411264 0685/000/01 0786/063/63 82 Linux swap
	Destination Disk Drive 0x81, BIOS: Legacy
	Interrupt 13 bios 0786/254/63 (max cyl/hd values)
	Interrupt 13 ext 00787/255/63 (number of cyl/hd)
	12643155 total number of sectors reported via interrupt 13 from the BIOS
	Start LBA Length Start C/H/S End C/H/S boot Partition type
	P 000000063 001230327 0000/001/01 1023/014/63 Boot 06 Fat16

Case DI-047 for SafeBack 2.18	

	X 001431990 001129905 1023/014/63 1023/014/63 05 extended
	S 000000063 000205632 1023/014/63 1023/014/63 83 Linux
	x 000205695 000145530 1023/014/63 1023/014/63 05 extended
	S 000000063 000145467 1023/014/63 1023/014/63 06 Fat16
	x 000762489 000185976 1023/014/63 1023/014/63 05 extended
	S 000000063 000185913 1023/014/63 1023/014/63 16 other
	S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	P 002561895 000065205 1023/014/63 1023/014/63 83 Linux
	P 002764188 000411957 1023/014/63 1023/014/63 82 Linux swap
	Safeback log: DI-047/SB_047C.TXT
	        SafeBack 2.18 13Feb01 execution started on Oct 26, 2001 08:43.
	08:43:44 Menu selections:
	      Function: Copy
	      Direct access: Yes
	      Use XBIOS: Auto
	      Adjust partitions: Auto
	      Backfill on restore: Yes
	08:44:15 Copy from Local drive 0: to local drive 1:
	08:44:21 Copy of Local drive 0: to drive 1: begun on Oct 26, 2001 08:44
	08:44:21 Local SafeBack is running on DOS 6.30
	08:44:21 Partition table for drive 0:
	      Source drive 0:
	        Capacity........1549 MB
	        Cylinders.......3148
	        Heads...........16
	        Model: WDC AC21600H
	        Serial Number: WD-WM3364967067
	        Firmware version: 24.09P07
	        IDE controller port with LBA direct drive access used.
	      Destination drive 1:
	        Capacity........6188 MB
	        Cylinders.......13410
	        Heads..........15
	        Model: FUJITSU MPE3064AT
	        Serial Number: 05294480
	        Firmware version: ED-03-04
	        IDE controller port with LBA direct drive access used.
	08:44:28 SafeBack has set the apparent geometry of the source drive to 787
	      cylinders, 64 heads and 63 sectors/head after examining the
	      master boot record.
	09:09:28 Partition table for drive 1:
	09:09:29 Copy of drive 0: to drive 1: completed on Oct 26, 2001 09:09
	      SafeBack execution ended on Oct 26, 2001 09:10.
	= = = = Measurement Logs = = = =
	Cylinder adjustment/alignment Summary
	Boot tracks 4 252 diffs 4
	Partitions 6 2241540 diffs 9
	Unallocated 4 931392 diffs 0
	Total src sectors 3173184
	Partition excess 2961 zero 2856 non-zero 105
	Disk excess 9496305 zero 9496305 non-zero 0
	Total dst sectors 12672450
	Hash after test: BD4140E6924156E1870E00983701405645359A00

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Cylinder Alignment anomaly
Analysis:	Expected results not achieved

Case DI-048 for SafeBack 2.18	
Case Summary:	Copy a direct access IDE source disk to a direct access IDE destination disk where the source disk is the same size as the destination
Tester Name:	JRL
Test Date:	Fri Oct 19 11:28:03 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label B6 Destination: DOS Drive 81 Physical Label B7

Case DI-048 for SafeBack 2.18	
	Image media: DOS Drive 82 Physical Label none B6 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B6 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 16:51:15 2001 cmd: Z:\ss\DISKWIPE.EXE B6 JudgeDee 80 B6 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B6 JudgeDee 80 /before /new_log Disk hash = 9AE1258B907A84E4AD2355BDCC21E9626822F071
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-048 Cadfael 81 B7 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-048 Cadfael 80 /all /new_log /comment JRL(B6) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-048 Cadfael 80 B6 81 B7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-048 cadfael 80 /comment JRL(B6) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-048

Log File Highlights:	Safeback log: DI-048/SB_048C.TXT
	      SafeBack 2.18 13Feb01 execution started on Oct 19, 2001 11:39.
	11:40:08 Menu selections:
	      Function: Copy
	      Direct access: Yes
	      Use XBIOS: Auto
	      Adjust partitions: No
	      Backfill on restore: No
	11:40:44 Copy from Local drive 0: to local drive 1:
	11:40:48 Copy of Local drive 0: to drive 1: begun on Oct 19, 2001 11:40
	11:40:48 Local SafeBack is running on DOS 6.30
	11:40:48 Partition table for drive 0:
	      Source drive 0:
	        Capacity........1549 MB
	        Cylinders.......3148
	        Heads...........16
	        Model: WDC AC21600H
	        Serial Number: WD-WM3363275935
	        Firmware version: 24.09P07
	        IDE controller port with LBA direct drive access used.
	      Destination drive 1:
	        Capacity........1549 MB
	        Cylinders.......3148
	        Heads...........16
	        Model: WDC AC21600H
	        Serial Number: WD-WM3362453003
	        Firmware version: 24.09P07
	        IDE controller port with LBA direct drive access used.
	11:54:02 Copy of drive 0: to drive 1: completed on Oct 19, 2001 11:54
	      SafeBack execution ended on Oct 19, 2001 12:33.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Hash after test: 9AE1258B907A84E4AD2355BDCC21E9626822F071

Expected Results:	Source disk is unchanged src compares equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-049 for SafeBack 2.18	
Case Summary:	Copy a direct access IDE source disk to a direct access IDE destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Fri Oct 26 10:06:31 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label F5 Destination: DOS Drive 81 Physical Label A6 Image media: DOS Drive 82 Physical Label none F5 is an IBM-DTLA-307020 with 40188960 sectors A6 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: F5 Host: Cadfael Operator: JRL OS: WindowsMe/Linux Date: Sat Aug 11 11:13:43 2001 DISKWIPE.EXE F5_SRC Cadfael 80 F5 /src X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE F5_SRC Cadfael 80 /before Disk hash = 83A0002816BBF089F8BE33C41C92C3B5A0F42A54
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-049 Cadfael 81 A6 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-049 Cadfael 80 /all /new_log /comment JRL(F5) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-049 Cadfael 80 F5 81 A6 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-049 Cadfael 80 /comment JRL(F5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-049

Log File Highlights:	Safeback log: DI-049/SB_049C.TXT
	     SafeBack 2.18 13Feb01 execution started on Oct 26, 2001 11:04.
	11:04:44 Menu selections:
	     Function: Copy
	     Direct access: Yes
	     Use XBIOS: Auto
	     Adjust partitions: No
	     Backfill on restore: No
	     SafeBack execution ended on Oct 26, 2001 11:05.
	     SafeBack 2.18 13Feb01 execution started on Oct 26, 2001 11:08.
	11:09:08 Menu selections:
	     Function: Copy
	     Direct access: Yes
	     Use XBIOS: Auto
	     Adjust partitions: No
	     Backfill on restore: No
	11:09:51 Copy from Local drive 0: to local drive 1:
	11:09:51 Insufficient destination file space projected.
	11:10:03 Copy of Local drive 0: to drive 1: begun on Oct 26, 2001 11:10
	11:10:03 Local SafeBack is running on DOS 6.30
	11:10:03 Partition table for drive 0:
	     Source drive 0:
	      Capacity........19624 MB
	      Cylinders.......39870
	      Heads...........16
	      Model: IBM-DTLA-307020
	      Serial Number: YHDYHLD2706
	      Firmware version: TX3GA50C
	      IDE controller port with LBA direct drive access used.
	     Destination drive 1:
	      Capacity........19093 MB
	      Cylinders.......38792
	      Heads...........16
	      Model: WDC WD200BB-00AUA1

Case DI-049 for SafeBack 2.18	
	Serial Number: WD-WMA6Y3452777 Firmware version: 18.20D18 IDE controller port with LBA direct drive access used. 13:38:13 Copy of drive 0: to drive 1: completed on Oct 26, 2001 13:38 SafeBack execution ended on Oct 26, 2001 13:43. = = = = Measurement Logs = = = = Sectors Compared 39102336 Sectors Differ 0 Diffs range Source (40188960) has 1086624 more sectors than destination (39102336) Hash after test: 83A0002816BBF089F8BE33C41C92C3B5A0F42A54
Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-050 for SafeBack 2.18	
Case Summary:	Copy an ASPI SCSI source disk to an ASPI SCSI destination disk where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Thu Oct 18 13:41:20 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label E3 Destination: DOS Drive 81 Physical Label E6 Image media: DOS Drive 82 Physical Label none E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E6 is a SEAGATE ST318404LC with 35843670 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-050 Cadfael 81 E6 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-050 Cadfael 80 /all /new_log /comment JRL(E3) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-050 Cadfael 80 E3 81 E6 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-050 cadfael 80 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-050

Log File
Highlights:
	Safeback log: DI-050/SB_050C.TXT
	SafeBack 2.18 13Feb01 execution started on Oct 18, 2001 14:17.
	14:18:35 Menu selections:
	    Function: Copy
	    Direct access: Yes
	    Use XBIOS: Auto
	    Adjust partitions: No
	    Backfill on restore: No
	14:19:06 Copy from Local drive 0: to local drive 1:
	14:19:12 Copy of Local drive 0: to drive 1: begun on Oct 18, 2001 14:19
	14:19:12 Local SafeBack is running on DOS 6.30
	14:19:12 Partition table for drive 0:
	    Source drive 0:
	      Capacity........8759 MB

Case DI-050 for SafeBack 2.18	
	Cylinders.......17338
	Heads...........3
	Model: QUANTUM ATLAS10K2-TY092J
	Serial Number: 16902814
	Firmware version: DDD6
	SCSI ASPI driver direct drive access used.
	Destination drive 1:
	Capacity........17502 MB
	Cylinders.......14384
	Heads..........6
	Model: SEAGATE ST318404LC
	Serial Number: 3BT1ZWXT
	Firmware version: 0006
	SCSI ASPI driver direct drive access used.
	14:29:22 Copy of drive 0: to drive 1: completed on Oct 18, 2001 14:29
	SafeBack execution ended on Oct 18, 2001 14:29.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 0
	Diffs range
	Source (17938985) has 17904685 fewer sectors than destination (35843670)
	Zero fill: 17904685
	Src Byte fill (E3): 0
	Dst Byte fill (E6): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-051 for SafeBack 2.18	
Case Summary:	Copy an ASPI SCSI source disk
	to an ASPI SCSI destination disk
	where the source disk is smaller than the destination
	and sector fill is turned on
Tester Name:	JRL
Test Date:	Thu Oct 18 16:43:56 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label E3
	Destination: DOS Drive 81 Physical Label E6
	Image media: DOS Drive 82 Physical Label none
	E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors
	E6 is a SEAGATE ST318404LC with 35843670 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16
	Disk: E3
	Host: Cadfael
	Operator: JRL
	OS: Linux Red Hat 7.1/Windows Me
	Date: Sat Jul 21 16:17:29 2001
	DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\fat-src.txt
	Load Operating System to Source disk
	DISKHASH.EXE E3_SRC Rumpole 80 /before
	Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-051 Cadfael 81 E6 /noask /dst /new_log /comment JRL
	No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-051 Cadfael 80 /all /new_log /comment JRL(E3)
	z:\sb\master (copy)
	Z:\ss\DISKCMP.EXE DI-051 Cadfael 80 E3 81 E6 /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-051 cadfael 80 /comment JRL(E3) /new_log /after

Case DI-051 for SafeBack 2.18	
Log files loc:	test-archive/sb/sb-2.18/DI-051

Log File Highlights:	Safeback log: DI-051/SB_051C.TXT
	      SafeBack 2.18 13Feb01 execution started on Oct 18, 2001 16:57.
	16:57:49 Menu selections:
	         Function: Copy
	         Direct access: Yes
	         Use XBIOS: Auto
	         Adjust partitions: No
	         Backfill on restore: Yes
	16:58:13 Copy from Local drive 0: to local drive 1:
	16:58:18 Copy of Local drive 0: to drive 1: begun on Oct 18, 2001 16:58
	16:58:18 Local SafeBack is running on DOS 6.30
	16:58:18 Partition table for drive 0:
	      Source drive 0:
	        Capacity........8759 MB
	        Cylinders.......17338
	        Heads...........3
	        Model: QUANTUM ATLAS10K2-TY092J
	        Serial Number: 16902814
	        Firmware version: DDD6
	        SCSI ASPI driver direct drive access used.
	      Destination drive 1:
	        Capacity........17502 MB
	        Cylinders.......14384
	        Heads...........6
	        Model: SEAGATE ST318404LC
	        Serial Number: 3BT1ZWXT
	        Firmware version: 0006
	        SCSI ASPI driver direct drive access used.
	17:08:29 Copy of drive 0: to drive 1: completed on Oct 18, 2001 17:08
	      SafeBack execution ended on Oct 18, 2001 18:12.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 0
	Diffs range
	Source (17938985) has 17904685 fewer sectors than destination (35843670)
	Zero fill: 17904685
	Src Byte fill (E3): 0
	Dst Byte fill (E6): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-054 for SafeBack 2.18	
Case Summary:	Copy an ASPI SCSI source disk to an ASPI SCSI destination disk where the source disk is the same size as the destination
Tester Name:	KBR
Test Date:	Thu Nov 15 08:05:41 2001
PC:	marple
Disks:	Source: DOS Drive 80 Physical Label C0 Destination: DOS Drive 81 Physical Label C1 Image media: DOS Drive 82 Physical Label none C0 is a SEAGATE ST39204LC with 17921835 sectors C1 is a SEAGATE ST39204LC with 17921835 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Diskwipe only, no OS Disk: C0 Host: Marple Operator: KBR OS: NoOs Options: none

Case DI-054 for SafeBack 2.18	
	Date: Mon Nov 05 08:29:33 2001 cmd: Z:\ss\DISKWIPE.EXE C0 Marple 80 C0 /src /new_log No partitions defined No OS loaded cmd: Z:\ss\DISKHASH.EXE C0 Marple 80 /before /new_log Disk hash = 469216C0D380A3E415690ADA72F560EAA71693F0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-054 marple 81 C1 /noask /dst /new_log /comment KBR
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-054 marple 80 /all /new_log /comment KBR(C1) Z:\ss\PARTAB.EXE DI-054 marple 81 /all /new_log /comment KBR(C1) Z:\ss\DISKCMP.EXE DI-054 marple 80 C0 81 C1 /new_log /comment KBR Z:\ss\DISKHASH.EXE DI-054 marple 80 /comment KBR(C0) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-054

Log File Highlights:	Safeback log: DI-054/DI054SB.TXT
	      SafeBack 2.18 13Feb01 execution started on Nov 15, 2001 08:56.
	 08:56:34 Menu selections:
	        Function: Copy
	        Direct access: Yes
	        Use XBIOS: Auto
	        Adjust partitions: No
	        Backfill on restore: No
	 08:57:00 Copy from Local drive 0: to local drive 1:
	 08:57:09 Copy of Local drive 0: to drive 1: begun on Nov 15, 2001 08:57
	 08:57:09 Local SafeBack is running on DOS 6.30
	      Source drive 0:
	        Capacity........8751 MB
	        Cylinders.......14384
	        Heads...........3
	        Model: SEAGATE ST39204LW
	        Serial Number: 3BV0N0VW
	        Firmware version: 0006
	        SCSI ASPI driver direct drive access used.
	      Destination drive 1:
	        Capacity........8751 MB
	        Cylinders.......14384
	        Heads...........3
	        Model: SEAGATE ST39204LW
	        Serial Number: 3BV0NJ7F
	        Firmware version: 0006
	        SCSI ASPI driver direct drive access used.
	 09:07:01 Copy of drive 0: to drive 1: completed on Nov 15, 2001 09:07
	      SafeBack execution ended on Nov 15, 2001 11:12.
	 = = = = Measurement Logs = = = =
	 Sectors Compared 17921835
	 Sectors Differ 0
	 Diffs range
	 Hash after test: 469216C0D380A3E415690ADA72F560EAA71693F0

Expected Results:	Source disk is unchanged src compares equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-055 for SafeBack 2.18	
Case Summary:	Copy an ASPI SCSI source disk to an ASPI SCSI destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Thu Oct 18 10:44:09 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label E3 Destination: DOS Drive 81 Physical Label EA Image media: DOS Drive 82 Physical Label none E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors

Case DI-055 for SafeBack 2.18	
	EA is a SEAGATE ST39204LC with 17921835 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-055 Cadfael 81 EA /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-055 Cadfael 80 /all /new_log /comment JRL(E3) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-055 Cadfael 80 E3 81 EA /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-055 cadfael 80 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-055

Log File Highlights:	Safeback log: DI-055/SB_055C.TXT
	        SafeBack 2.18 13Feb01 execution started on Oct 18, 2001 10:50.
	10:50:45 Menu selections:
	             Function: Copy
	             Direct access: Yes
	             Use XBIOS: Yes
	             Adjust partitions: No
	             Backfill on restore: No
	10:51:15 Copy from Local drive 0: to local drive 1:
	10:51:15 Insufficient destination file space projected.
	10:51:23 Copy of Local drive 0: to drive 1: begun on Oct 18, 2001 10:51
	10:51:23 Local SafeBack is running on DOS 6.30
	10:51:23 Partition table for drive 0:
	             Source drive 0:
	               Capacity........8759 MB
	               Cylinders.......17338
	               Heads...........3
	               Model: QUANTUM ATLAS10K2-TY092J
	               Serial Number: 16902814
	               Firmware version: DDD6
	               SCSI ASPI driver direct drive access used.
	             Destination drive 1:
	               Capacity........8751 MB
	               Cylinders.......14384
	               Heads...........3
	               Model: SEAGATE ST39204LC
	               Serial Number: 3BV0WL0D
	               Firmware version: 0006
	               SCSI ASPI driver direct drive access used.
	10:56:26 Copy of drive 0: to drive 1: completed on Oct 18, 2001 10:56
	             SafeBack execution ended on Oct 18, 2001 10:56.
	= = = = Measurement Logs = = = =
	Sectors Compared 17921835
	Sectors Differ 0
	Diffs range
	Source (17938985) has 17150 more sectors than destination (17921835)
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0

Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-056 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-SCSI destination disk where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Fri Oct 26 12:23:38 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B6 Destination: DOS Drive 81 Physical Label EA Image media: DOS Drive 82 Physical Label none B6 is a WDC AC21600H with 3173184 sectors EA is a SEAGATE ST39204LC with 17921835 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B6 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 16:51:15 2001 cmd: Z:\ss\DISKWIPE.EXE B6 JudgeDee 80 B6 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B6 JudgeDee 80 /before /new_log Disk hash = 9AE1258B907A84E4AD2355BDCC21E9626822F071
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-056 Rumpole 81 EA /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-056 Rumpole 80 /all /new_log /comment JRL(B6) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-056 Rumpole 80 B6 81 EA /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-056 Rumpole 80 /comment JRL(B6) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-056

Log File
Highlights:
	Safeback log: DI-056/SB_056C.TXT
	        SafeBack 2.18 13Feb01 execution started on Oct 26, 2001 12:29.
	        The tape drive was not used.
	12:29:51 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: No
	12:30:02 Copy from Local drive 0: to local drive 1:
	12:30:06 Copy of Local drive 0: to drive 1: begun on Oct 26, 2001 12:30
	12:30:06 Local SafeBack is running on DOS 6.30
	12:30:06 Partition table for drive 0:
	        Source drive 0:
	            Capacity........1549 MB
	            Cylinders.......3148
	            Heads...........16
	        Destination drive 1:
	            Capacity........8751 MB
	            Cylinders.......1115
	            Heads..........255
	12:39:24 Copy of drive 0: to drive 1: completed on Oct 26, 2001 12:39
	        SafeBack execution ended on Oct 26, 2001 12:42.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Source (3173184) has 14748651 fewer sectors than destination (17921835)
	Zero fill: 14748651
	Src Byte fill (B6): 0
	Dst Byte fill (EA): 0
	Other fill: 0
	Other no fill: 0

Case DI-056 for SafeBack 2.18	
	Hash after test: 9AE1258B907A84E4AD2355BDCC21E9626822F071
Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-057 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-SCSI destination disk where the source disk is smaller than the destination and sector fill is turned on
Tester Name:	JRL
Test Date:	Fri Oct 26 15:30:02 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label EA Image media: DOS Drive 82 Physical Label none B8 is a WDC AC21600H with 3173184 sectors EA is a SEAGATE ST39204LC with 17921835 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-057 Rumpole 81 EA /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-057 Rumpole 80 /all /new_log /comment JRL(B8) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-057 Rumpole 80 B8 81 EA /new_log /comment JRL z:\ss\DISKHASH.EXE DI-057 JudgeDee 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-057

Log File Highlights:	Safeback log: DI-057/SB_057C.TXT
	          SafeBack 2.18 13Feb01 execution started on Oct 26, 2001 15:38.
	          The tape drive was not used.
	15:38:27 Menu selections:
	               Function: Copy
	               Direct access: No
	               Use XBIOS: Yes
	               Adjust partitions: No
	               Backfill on restore: Yes
	15:38:37 Copy from Local drive 0: to local drive 1:
	15:38:41 Copy of Local drive 0: to drive 1: begun on Oct 26, 2001 15:38
	15:38:41 Local SafeBack is running on DOS 6.30
	15:38:41 Partition table for drive 0:
	          Source drive 0:
	            Capacity........1549 MB
	            Cylinders.......3148
	            Heads...........16
	          Destination drive 1:
	            Capacity.......8751 MB
	            Cylinders.......4444
	            Heads..........64
	15:47:58 Copy of drive 0: to drive 1: completed on Oct 26, 2001 15:47
	          SafeBack execution ended on Oct 26, 2001 15:49.

Case DI-057 for SafeBack 2.18	
	= = = = Measurement Logs = = = = Sectors Compared 3173184 Sectors Differ 0 Diffs range Source (3173184) has 14748651 fewer sectors than destination (17921835) Zero fill: 14748651 Src Byte fill (B8): 0 Dst Byte fill (EA): 0 Other fill: 0 Other no fill: 0 Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-058 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-IDE source disk to an XBIOS-SCSI destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Tue Nov 06 12:10:25 2001
PC:	Wimsey
Disks:	Source: DOS Drive 80 Physical Label F5 Destination: DOS Drive 81 Physical Label EB Image media: DOS Drive 82 Physical Label none F5 is an IBM-DTLA-307020 with 40188960 sectors EB is a SEAGATE ST39204LC with 17921835 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: F5 Host: Cadfael Operator: JRL OS: WindowsMe/Linux Date: Sat Aug 11 11:13:43 2001 DISKWIPE.EXE F5_SRC Cadfael 80 F5 /src X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE F5_SRC Cadfael 80 /before Disk hash = 83A0002816BBF089F8BE33C41C92C3B5A0F42A54
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-058 Wimsey 81 EB /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-058 Wimsey 80 /all /new_log /comment JRL(EB) Z:\ss\PARTAB.EXE DI-058 Wimsey 81 /all /new_log /comment JRL(EB) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-058 Wimsey 80 F5 81 EB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-058 Cadfael 80 /comment JRL(F5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-058

Log File
Highlights:
	Safeback log: DI-058/SB_058C.TXT
	        SafeBack 2.18 13Feb01 execution started on Nov 6, 2001 12:17.
	12:17:53 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: No
	12:18:07 Copy from Local drive 0: to local drive 1:
	12:18:07 Insufficient destination file space projected.
	12:18:14 Copy of Local drive 0: to drive 1: begun on Nov 6, 2001 12:18
	12:18:14 Local SafeBack is running on DOS 6.30
	12:18:14 Partition table for drive 0:
	            Source drive 0:

Case DI-058 for SafeBack 2.18	
	Capacity........19624 MB
	Cylinders.......2501
	Heads..........255
	Destination drive 1:
	Capacity........8751 MB
	Cylinders......1115
	Heads..........255
	12:38:13 Copy of drive 0: to drive 1: completed on Nov 6, 2001 12:38
	SafeBack execution ended on Nov 6, 2001 13:22.
	= = = = Measurement Logs = = = =
	Sectors Compared 17921835
	Sectors Differ 0
	Diffs range
	Source (40188960) has 22267125 more sectors than destination (17921835)
	Hash after test: 83A0002816BBF089F8BE33C41C92C3B5A0F42A54
Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-059 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-SCSI source disk to an XBIOS-IDE destination disk where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Sun Nov 04 11:21:26 2001
PC:	Rumpole
Disks:	Source: DOS Drive 81 Physical Label E3 Destination: DOS Drive 80 Physical Label A8 Image media: DOS Drive 82 Physical Label none E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors A8 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-059 Rumpole 80 A8 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-059 Rumpole 80 /all /new_log /comment JRL(A8) Z:\ss\PARTAB.EXE DI-059 Rumpole 81 /all /new_log /comment JRL(A8) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-059 Rumpole 81 E3 80 A8 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-059 Rumpole 81 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-059

Log File Highlights:	Safeback log: DI-059/SB_059C.TXT
	        SafeBack 2.18 13Feb01 execution started on Nov 4, 2001 12:03.
	        The tape drive was not used.
	12:03:45 Menu selections:
	            Function: Copy
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: No

Case DI-059 for SafeBack 2.18	

	12:04:02 Copy from Local drive 1: to local drive 0:
	12:04:08 Copy of Local drive 1: to drive 0: begun on Nov 4, 2001 12:04
	12:04:08 Local SafeBack is running on DOS 6.30
	12:04:08 Partition table for drive 1:
	        Source drive 1:
	          Capacity........8759 MB
	          Cylinders.......1116
	          Heads...........255
	        Destination drive 0:
	          Capacity........19093 MB
	          Cylinders.......2434
	          Heads...........255
	12:45:18 Copy of drive 1: to drive 0: completed on Nov 4, 2001 12:45
	        SafeBack execution ended on Nov 4, 2001 13:03.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 0
	Diffs range
	Source (17938985) has 21163351 fewer sectors than destination (39102336)
	Zero fill: 21163351
	Src Byte fill (E3): 0
	Dst Byte fill (A8): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-060 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-SCSI source disk to an XBIOS-IDE destination disk where the source disk is smaller than the destination and sector fill is turned on
Tester Name:	JRL
Test Date:	Sun Nov 04 12:29:50 2001
PC:	Cadfael
Disks:	Source: DOS Drive 81 Physical Label E4 Destination: DOS Drive 80 Physical Label A6 Image media: DOS Drive 82 Physical Label none E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors A6 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32 Disk: E4 Host: JudgeDee Operator: JRL OS: Windows 2000/NT Date: Sat Jul 21 16:58:28 2001 DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000 source disk X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-060 Cadfael 80 A6 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-060 Cadfael 80 /all /new_log /comment JRL(A6) Z:\ss\PARTAB.EXE DI-060 Cadfael 81 /all /new_log /comment JRL(A6) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-060 Cadfael 81 E4 80 A6 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-060 Cadfael 81 /comment JRL(E4) /new_log /after

Case DI-060 for SafeBack 2.18	
Log files loc:	test-archive/sb/sb-2.18/DI-060

Log File Highlights:	Safeback log: DI-060/SB_060C.TXT
	       SafeBack 2.18 13Feb01 execution started on Nov 4, 2001 13:12.
	13:12:32 Menu selections:
	       Function: Copy
	       Direct access: No
	       Use XBIOS: Yes
	       Adjust partitions: No
	       Backfill on restore: Yes
	13:12:42 Copy from Local drive 1: to local drive 0:
	13:12:47 Copy of Local drive 1: to drive 0: begun on Nov 4, 2001 13:12
	13:12:47 Local SafeBack is running on DOS 6.30
	13:12:47 Partition table for drive 1:
	       Source drive 1:
	         Capacity........8759 MB
	         Cylinders.......1116
	         Heads...........255
	       Destination drive 0:
	         Capacity........19093 MB
	         Cylinders.......2434
	         Heads...........255
	13:54:15 Copy of drive 1: to drive 0: completed on Nov 4, 2001 13:54
	       SafeBack execution ended on Nov 4, 2001 14:10.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 0
	Diffs range
	Source (17938985) has 21163351 fewer sectors than destination (39102336)
	Zero fill: 21163351
	Src Byte fill (E4): 0
	Dst Byte fill (A6): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-061 for SafeBack 2.18	
Case Summary:	Copy an XBIOS-SCSI source disk to an XBIOS-IDE destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Sat Nov 03 10:26:13 2001
PC:	Rumpole
Disks:	Source: DOS Drive 81 Physical Label E3 Destination: DOS Drive 80 Physical Label BB Image media: DOS Drive 82 Physical Label none E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors BB is a QUANTUM FIREBALL ST3.2A with 6306048 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination	Z:\ss\DISKWIPE.EXE DI-061 Rumpole 80 BB /noask /dst /new_log /comment JRL

Case DI-061 for SafeBack 2.18	
Setup:	
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-061 Rumpole 80 /all /new_log /comment JRL(BB) Z:\ss\PARTAB.EXE DI-061 Rumpole 81 /all /new_log /comment JRL(BB) z:\sb\master (copy) Z:\ss\DISKCMP.EXE DI-061 Rumpole 81 E3 80 BB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-061 Rumpole 81 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-061

Log File Highlights:	Safeback log: DI-061/SB_061C.TXT
	       SafeBack 2.18 13Feb01 execution started on Nov 3, 2001 15:20.
	       The tape drive was not used.
	15:20:46 Menu selections:
	       Function: Copy
	       Direct access: No
	       Use XBIOS: Yes
	       Adjust partitions: No
	       Backfill on restore: No
	15:21:04 Copy from Local drive 1: to local drive 0:
	15:21:04 Insufficient destination file space projected.
	15:21:13 Copy of Local drive 1: to drive 0: begun on Nov 3, 2001 15:21
	15:21:13 Local SafeBack is running on DOS 6.30
	15:21:13 Partition table for drive 1:
	       Source drive 1:
	         Capacity........8759 MB
	         Cylinders.......1116
	         Heads...........255
	       Destination drive 0:
	         Capacity.......3079 MB
	         Cylinders.......6256
	         Heads...........16
	15:29:31 Copy of drive 1: to drive 0: completed on Nov 3, 2001 15:29
	       SafeBack execution ended on Nov 3, 2001 15:29.
	= = = = Measurement Logs = = = =
	Sectors Compared 6306048
	Sectors Differ 0
	Diffs range
	Source (17938985) has 11632937 more sectors than destination (6306048)
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0

Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-062 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is smaller than the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Sun Nov 04 12:53:38 2001
PC:	Beta6
Disks:	Source: DOS Drive 80 Physical Label A3 Destination: DOS Drive 81 Physical Label BD Image media: DOS Drive 82 Physical Label D3 A3 is a Quantum Sirooco1700A with 3335472 sectors BD is a QUANTUM FIREBALL ST3.2A with 6306048 sectors D3 is a Fujitsu MPE3064AT with 12672450 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: A3 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical

Case DI-062 for SafeBack 2.18	
	Date: Sat Nov 03 16:01:24 2001 cmd: Z:\ss\DISKWIPE.EXE A3 JudgeDee 80 A3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE A3 JudgeDee 80 /before /new_log Disk hash = 27E36D91D13ADEE11316951CFE492E3C66053191
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-062 Beta6 81 BD /noask /dst /new_log /comment JRL
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-062 Host C:\IMG.001 9208 AE /comment None Change byte 9208 of file C:\IMG.001 from 0xFFA3 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-062 Beta6 80 /all /new_log /comment JRL(BD) Z:\ss\PARTAB.EXE DI-062 Beta6 81 /all /new_log /comment JRL(BD) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-062 Beta6 80 A3 81 BD /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-062 Beta6 80 /comment JRL(A3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-062

Log File Highlights:	Safeback log: DI-062/SB_062B.TXT
	     SafeBack 2.18 13Feb01 execution started on Nov 4, 2001 13:14.
	13:14:34 Menu selections:
	      Function: Backup
	      Direct access: No
	      Use XBIOS: No
	      Adjust partitions: No
	      Backfill on restore: No
	13:14:53 Backup file D:\IMG.001 created.
	     Backup file comment record:
	      DI-062
	13:15:01 Backing up drive 0:
	     to D:\IMG.001 on Nov 4, 2001 13:15
	13:15:03 Local SafeBack is running on DOS 6.30
	     Source drive 0:
	      Capacity........1628 MB
	      Cylinders.......827
	      Heads...........64
	13:15:03 Partition table for drive 0:
	13:27:24 Backup file CRC: 77b22116.
	13:27:24 Backup of drive 0: completed on Nov 4, 2001 13:27.
	     SafeBack execution ended on Nov 4, 2001 14:04.
	Safeback log: DI-062/SB_062R.TXT
	     SafeBack 2.18 13Feb01 execution started on Nov 4, 2001 14:24.
	14:24:29 Menu selections:
	      Function: Restore
	      Direct access: No
	      Use XBIOS: No
	      Adjust partitions: No
	      Backfill on restore: No
	14:24:44 Backup file created on Nov 4, 2001 13:15
	     by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	     Backup file comment record:
	      DI-062
	14:24:48 Backup file C:\IMG.001 opened for access.
	14:25:12 Restore of drive 0: from C:\IMG.001
	     to drive 1: started on Nov 4, 2001 14:25
	14:25:12 Partition fixup has been disabled.
	14:25:12 Local SafeBack is running on DOS 6.30
	     Source drive 0:
	      Capacity........1628 MB
	      Cylinders.......827
	      Heads...........64
	     Destination drive 1:
	      Capacity........3079 MB
	      Cylinders.......782
	      Heads...........128
	14:25:12 IMG.001, record 0 has a CRC error. 9649 was expected, but e5c4 read.

Case DI-062 for SafeBack 2.18	

	14:26:50 Backup file CRC error ignored by recovery at sector 0.
	14:27:13 Data starting at sector 0 and the next 119 sectors is
	          questionable due to CRC errors.
	14:38:34 CRC mismatch: Calculated: e8b30a50, Read: 77b22116
	14:44:00 Restore of drive 0: to drive 1: completed on Nov 4, 2001 14:44
	14:51:33 Menu selections:
	          Function: Restore
	          Direct access: No
	          Use XBIOS: No
	          Adjust partitions: No
	          Backfill on restore: No
	          SafeBack execution ended on Nov 4, 2001 14:51.
	= = = = Measurement Logs = = = =
	Sectors Compared 3335472
	Sectors Differ 1009
	Diffs range 17, 3334464-3335471
	Source (3335472) has 2970576 fewer sectors than destination (6306048)
	Zero fill: 2970576
	Src Byte fill (A3): 0
	Dst Byte fill (BD): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 27E36D91D13ADEE11316951CFE492E3C66053191

Expected Results:	Source disk is unchanged image verification error
Actual Results:	BIOS anomaly, Backfill anomaly
Analysis:	Expected results not achieved

Case DI-063 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Thu Nov 01 14:57:33 2001
PC:	Beta4
Disks:	Source: DOS Drive 80 Physical Label B5 Destination: DOS Drive 81 Physical Label D7 Image media: DOS Drive 82 Physical Label D3 B5 is a WDC AC21600H with 3173184 sectors D7 is a Quantum Sirooco1700A with 3335472 sectors D3 is a Fujitsu MPE3064AT with 12672450 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B5 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Mon Oct 15 11:18:11 2001 cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log Disk hash = BD4140E6924156E1870E00983701405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-063 Beta4 81 B7 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-063 Beta4 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-063 Beta4 81 /all /new_log /comment JRL(B7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-063 Beta4 80 B5 81 B7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-063 beta4 80 /comment JRL(B5) /new_log /after
Log files	test-archive/sb/sb-2.18/DI-063

```
Case DI-063 for SafeBack 2.18
loc:
Log File        Safeback log: DI-063/SB_063B.TXT
Highlights:             SafeBack 2.18 13Feb01 execution started on Nov  1, 2001 14:58.
                14:58:56  Menu selections:
                             Function:            Backup
                             Direct access:       No
                             Use XBIOS:           No
                             Adjust partitions:   No
                             Backfill on restore: No
                        SafeBack execution ended on Nov  1, 2001 15:01.
                        SafeBack 2.18 13Feb01 execution started on Nov  1, 2001 15:06.
                15:07:01  Menu selections:
                             Function:            Backup
                             Direct access:       No
                             Use XBIOS:           No
                             Adjust partitions:   No
                             Backfill on restore: No
                15:07:25  Backup file D:\IMG.001 created.
                        Backup file comment record:
                          test 063
                15:07:49  Backing up drive 0:
                          to D:\IMG.001 on Nov  1, 2001 15:07
                15:07:51  Local SafeBack is running on DOS 6.30
                        Source drive 0:
                          Capacity........1549 MB
                          Cylinders.......787
                          Heads...........64
                15:07:51  Partition table for drive 0:
                15:19:38  Backup file CRC: c47d6f53.
                15:19:38  Backup of drive 0: completed on Nov  1, 2001 15:19.
                        SafeBack execution ended on Nov  1, 2001 15:25.
                Safeback log: DI-063/SB_063R.TXT
                        SafeBack 2.18 13Feb01 execution started on Nov  1, 2001 15:48.
                15:48:32  Menu selections:
                             Function:            Restore
                             Direct access:       No
                             Use XBIOS:           No
                             Adjust partitions:   No
                             Backfill on restore: No
                15:49:16  Backup file created on Nov  1, 2001 15:07
                          by Gary Fisher Natl Institute of Standards & Technology
                Software Diagnostics & Con
                        Backup file comment record:
                          test 063
                15:49:20  Backup file C:\IMG.001 opened for access.
                15:49:38  Restore of drive 0: from C:\IMG.001
                          to drive 1: started on Nov  1, 2001 15:49
                15:49:38  Partition fixup has been disabled.
                15:49:38  Local SafeBack is running on DOS 6.30
                        Source drive 0:
                          Capacity........1549 MB
                          Cylinders.......787
                          Heads...........64
                        Destination drive 1:
                          Capacity........1628 MB
                          Cylinders.......827
                          Heads...........64
                16:00:47  The whole-file CRC verifies:  c47d6f53
                16:01:18  Restore of drive 0: to drive 1: completed on Nov  1, 2001 16:01
                16:04:52  Menu selections:
                             Function:            Restore
                             Direct access:       No
                             Use XBIOS:           No
                             Adjust partitions:   No
                             Backfill on restore: No
                        SafeBack execution ended on Nov  1, 2001 16:04.
                Safeback log: DI-063/SB_2-0.TXT
                        SafeBack 2.0 31Jan00 execution started on Nov  1, 2001 15:05.
                15:05:40  Menu selections:
                             Function:            Backup
```

Case DI-063 for SafeBack 2.18	
	Direct access: No Use XBIOS: No Adjust partitions: No Backfill on restore: No SafeBack execution ended on Nov 1, 2001 15:06. = = = = Measurement Logs = = = = Sectors Compared 3173184 Sectors Differ 0 Diffs range Source (3173184) has 162288 fewer sectors than destination (3335472) Zero fill: 161280 Src Byte fill (B5): 0 Dst Byte fill (B7): 1008 Other fill: 0 Other no fill: 0 Hash after test: BD4140E6924156E1870E00983701405645359A00
Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	BIOS anomaly, Backfill anomaly
Analysis:	Expected results not achieved

Case DI-064 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is the same size as the destination Introduce a read error from the source.
Tester Name:	JRL
Test Date:	Tue Oct 08 07:48:50 2002
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1 Destination: DOS Drive 81 Physical Label D7 Image media: DOS Drive 80 Physical Label D3 A1 is a Quantum Sirooco1700A with 3335472 sectors D7 is a Quantum Sirooco1700A with 3335472 sectors D3 is a Fujitsu MPE3064AT with 12672450 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: A1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Tue Oct 16 11:24:16 2001 cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-064 Beta3 81 D7 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	Z:\ss\baddisk 80 5 2 61 2 10 > a:\err-064.txt Z:\ss\baddisk 80 5 2 61 10 10 >> a:\err-064.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00002 from disk 00080 at address 00005/00002/00061 return code 00010 on command 00010 from disk 00080 at address 00005/00002/00061
Execute:	z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-064 Beta3 80 A1 81 D7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-064 JudgeDee 80 /comment A1(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-064

Case DI-064 for SafeBack 2.18	

Log File Highlights:	Safeback log: DI-064/SB_064B.TXT
	      SafeBack 2.18 13Feb01 execution started on Oct 8, 2002 07:59.
	07:59:39 Menu selections:
	        Function: Backup
	        Direct access: No
	        Use XBIOS: No
	        Adjust partitions: No
	        Backfill on restore: No
	08:00:11 Backup file F:\IMG.001 created.
	      Backup file comment record:
	       DI-064
	08:00:20 Backing up drive 0:
	      to F:\IMG.001 on Oct 8, 2002 08:00
	08:00:21 Local SafeBack is running on DOS 7.10
	      Source drive 0:
	       Capacity........1628 MB
	       Cylinders.......827
	       Heads...........64
	08:00:21 Partition table for drive 0:
	08:00:26 While reading drive 0: a sector flagged bad error (status 0a) occurred:
	      at relative sector 20346 (Cylinder 5, Head 2, Sector 61)
	08:14:17 Backup file CRC: b2ce8cc4.
	08:14:17 Backup of drive 0: completed on Oct 8, 2002 08:14.
	      SafeBack execution ended on Oct 8, 2002 08:14.
	Safeback log: DI-064/SB_064R.TXT
	      SafeBack 2.18 13Feb01 execution started on Oct 8, 2002 08:17.
	08:17:59 Menu selections:
	        Function: Restore
	        Direct access: No
	        Use XBIOS: No
	        Adjust partitions: No
	        Backfill on restore: No
	08:18:21 Backup file created on Oct 8, 2002 08:00
	      by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	      Backup file comment record:
	       DI-064
	08:18:23 Backup file D:\IMG.001 opened for access.
	08:18:33 Restore of drive 0: from D:\IMG.001
	      to drive 1: started on Oct 8, 2002 08:18
	08:18:33 Partition fixup has been disabled.
	08:18:33 Local SafeBack is running on DOS 7.10
	      Source drive 0:
	       Capacity........1628 MB
	       Cylinders.......827
	       Heads...........64
	      Destination drive 1:
	       Capacity........1628 MB
	       Cylinders.......827
	       Heads...........64
	08:18:39 The image for 0: shows that a sector flagged bad error (status 0a) occurred
	      during backup at relative sector 20346 (Cylinder 5, Head 2, Sector 61)
	08:30:28 The whole-file CRC verifies: b2ce8cc4
	08:32:18 Restore of drive 0: to drive 1: completed on Oct 8, 2002 08:32
	08:32:27 Menu selections:
	        Function: Restore
	        Direct access: No
	        Use XBIOS: No
	        Adjust partitions: No
	        Backfill on restore: No
	      SafeBack execution ended on Oct 8, 2002 08:32.
	= = = = Measurement Logs = = = =
	Sectors Compared 3335472
	Sectors Differ 1009
	Diffs range 20346, 3334464-3335471
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F

Expected	Source disk is unchanged

Case DI-064 for SafeBack 2.18	
Results:	src compares qualified equal to dst
	error message logged
Actual Results:	BIOS anomaly
Analysis:	Expected results not achieved

Case DI-065 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk
	to a BIOS-IDE destination disk
	where the source disk is the same size as the destination
	Introduce a write error to the destination.
Tester Name:	JRL
Test Date:	Mon Oct 07 09:15:08 2002
PC:	Beta7
Disks:	Source: DOS Drive 80 Physical Label B5
	Destination: DOS Drive 81 Physical Label B9
	Image media: DOS Drive 80 Physical Label DB
	B5 is a WDC AC21600H with 3173184 sectors
	B9 is a WDC AC21600H with 3173184 sectors
	DB is a Fujitsu MPE3064AT with 12672450 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16
	Disk: B5
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Mon Oct 15 11:18:11 2001
	cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\nex-src.txt
	Load Operating System to Source disk
	cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log
	Disk hash = BD4140E6924156E1870E00983701405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-065 Beta7 81 B9 /noask /dst /new_log /comment JRL
	No partition table defined
Error Setup:	Z:\ss\baddisk 81 5 9 8 3 10 > a:\err-065.txt
	Version 3.2 Created 06/05/02 at 13:50:39
	baddisk compiled on 06/05/02 at 12:19:31
	return code 00010 on command 00003 from disk 00081
	at address 00005/00009/00008
Execute:	z:\sb\master (backup to image)
	z:\sb\master (restore from image)
	Z:\ss\DISKCMP.EXE DI-065 Beta7 80 B5 81 B9 /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-065 JudgeDee 80 /comment B5(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-065
Log File Highlights:	Safeback log: DI-065/SB_065B.TXT
	SafeBack 2.18 13Feb01 execution started on Oct 7, 2002 09:30.
	09:30:10 Menu selections:
	Function: Backup
	Direct access: No
	Use XBIOS: No
	Adjust partitions: No
	Backfill on restore: No
	09:30:28 Backup file D:\IMG.001 created.
	Backup file comment record:
	DI-065
	09:30:35 Backing up drive 0:
	to D:\IMG.001 on Oct 7, 2002 09:30
	09:30:36 Local SafeBack is running on DOS 7.10
	Source drive 0:
	Capacity........1549 MB
	Cylinders.......787
	Heads...........64
	09:30:36 Partition table for drive 0:

Case DI-065 for SafeBack 2.18	

	09:42:17 Backup file CRC: e4110b05.
	09:42:17 Backup of drive 0: completed on Oct 7, 2002 09:42.
	         SafeBack execution ended on Oct 7, 2002 10:07.
	Safeback log: DI-065/SB_065R.TXT
	         SafeBack 2.18 13Feb01 execution started on Oct 7, 2002 10:10.
	10:11:12 Menu selections:
	            Function: Restore
	            Direct access: No
	            Use XBIOS: No
	            Adjust partitions: No
	            Backfill on restore: No
	10:11:27 Backup file created on Oct 7, 2002 09:30
	          by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	            Backup file comment record:
	              DI-065
	10:11:29 Backup file C:\IMG.001 opened for access.
	10:11:38 Restore of drive 0: from C:\IMG.001
	          to drive 1: started on Oct 7, 2002 10:11
	10:11:38 Partition fixup has been disabled.
	10:11:38 Local SafeBack is running on DOS 7.10
	            Source drive 0:
	              Capacity........1549 MB
	              Cylinders.......787
	              Heads...........64
	            Destination drive 1:
	              Capacity........1549 MB
	              Cylinders.......787
	              Heads...........64
	10:11:43 While writing drive 1:, a sector flagged bad error (status 0a)
	occurred
	          at relative sector 20734 (Cylinder 5, Head 9, Sector 8)
	10:23:30 The whole-file CRC verifies: e4110b05
	10:23:30 Restore of drive 0: to drive 1: completed on Oct 7, 2002 10:23
	10:23:38 Menu selections:
	            Function: Restore
	            Direct access: No
	            Use XBIOS: No
	            Adjust partitions: No
	            Backfill on restore: No
	          SafeBack execution ended on Oct 7, 2002 10:23.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 91
	Diffs range 20734-20824
	Hash after test: BD4140E6924156E1870E00983701405645359A00

Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-066 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is the same size as the destination Introduce a read error reading from the image.
Tester Name:	JRL
Test Date:	Sun Jun 16 12:43:45 2002
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1 Destination: DOS Drive 81 Physical Label A4 Image media: DOS Drive 80 Physical Label DA A1 is a Quantum Sirooco1700A with 3335472 sectors A4 is a Quantum Sirooco1700A with 3335472 sectors DA is a Fujitsu MPE3064AT with 12672450 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2

Case DI-066 for SafeBack 2.18	
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: A1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Tue Oct 16 11:24:16 2001 cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-066 Beta3 81 A4 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	Z:\ss\baddisk 80 1 38 29 2 10 > a:\err-066.txt Z:\ss\baddisk 80 1 38 29 10 10 >> a:\err-066.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00002 from disk 00080 at address 00001/00038/00029 return code 00010 on command 00010 from disk 00080 at address 00001/00038/00029
Execute:	z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-066 Beta3 80 A1 81 A4 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-066 Beta6 80 /comment A1(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-066

Log File Highlights:	Safeback log: DI-066/SB_066B.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 13:20.
	13:20:09 Menu selections:
	            Function: Backup
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	13:21:01 Backup file D:\IMG.001 created.
	            Backup file comment record:
	              DI-066
	13:21:09 Backing up drive 0:
	            to D:\IMG.001 on Jun 16, 2002 13:21
	13:21:11 Local SafeBack is running on DOS 7.10
	            Source drive 0:
	              Capacity........1628 MB
	              Cylinders.......827
	              Heads...........64
	13:21:11 Partition table for drive 0:
	13:33:21 Backup file CRC: 66550957.
	13:33:21 Backup of drive 0: completed on Jun 16, 2002 13:33.
	            SafeBack execution ended on Jun 16, 2002 14:36.
	Safeback log: DI-066/SB_066R.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 14:43.
	14:43:41 Menu selections:
	            Function: Restore
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	14:43:52 Backup file created on Jun 16, 2002 13:21
	             by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	            Backup file comment record:
	              DI-066
	14:43:57 Backup file C:\IMG.001 opened for access.
	14:44:15 Restore of drive 0: from C:\IMG.001
	            to drive 1: started on Jun 16, 2002 14:44
	14:44:15 Local SafeBack is running on DOS 7.10
	            Source drive 0:

Case DI-066 for SafeBack 2.18	
	Capacity........1628 MB
	Cylinders.......827
	Heads...........64
	Destination drive 1:
	Capacity........1628 MB
	Cylinders.......827
	Heads...........64
	14:44:58 While reading C:\IMG.001 at 9120144, an access denied error occurred on the backup file. A
	data block consisting of zeroes was used in place of the data to
	be read. As a result, another error message will follow this one.
	14:44:58 IMG.001, record 20111 has a CRC error. fb13 was expected, but 61bf read.
	14:45:03 Backup file CRC error ignored by recovery at sector 20111.
	14:45:34 Resuming reading at sector 20111: 119 sectors were lost during error recovery.
	14:56:00 CRC mismatch: Calculated: e4ced409, Read: 66550957
	14:56:12 Partition table for drive 1:
	14:56:13 Restore of drive 0: to drive 1: completed on Jun 16, 2002 14:56
	14:56:22 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	SafeBack execution ended on Jun 16, 2002 14:56.
	= = = = Measurement Logs = = = =
	Sectors Compared 3335472
	Sectors Differ 1127
	Diffs range 20111-20229, 3334464-3335471
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F
Expected Results:	Source disk is unchanged
	error message logged
Actual Results:	BIOS anomaly
Analysis:	Expected results not achieved

Case DI-067 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk
	to a BIOS-IDE destination disk
	where the source disk is the same size as the destination
	Introduce a write error writing to the image.
Tester Name:	JRL
Test Date:	Sun Jun 16 19:10:17 2002
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1
	Destination: DOS Drive 81 Physical Label A4
	Image media: DOS Drive 80 Physical Label DA
	A1 is a Quantum Sirooco1700A with 3335472 sectors
	A4 is a Quantum Sirooco1700A with 3335472 sectors
	DA is a Fujitsu MPE3064AT with 12672450 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16
	Disk: A1
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Tue Oct 16 11:24:16 2001
	cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\nex-src.txt
	Load Operating System to Source disk
	cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log
	Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F

Case DI-067 for SafeBack 2.18	
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-067 Beta3 81 A4 /noask /dst /new_log /comment JRL No partition table defined
Error Setup:	Z:\ss\baddisk 81 2 35 55 3 10 > a:\err-067.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00003 from disk 00081 at address 00002/00035/00055
Execute:	z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-067 Beta3 80 A1 81 A4 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-067 Beta3 80 /comment A1(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-067

Log File Highlights:	Safeback log: DI-067/SB_067B.TXT
	     SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 19:50.
	19:50:54 Menu selections:
	        Function: Backup
	        Direct access: No
	        Use XBIOS: Auto
	        Adjust partitions: Auto
	        Backfill on restore: Yes
	19:51:13 Backup file D:\IMG.001 created.
	        Backup file comment record:
	         DI-067
	19:51:20 Backing up drive 0:
	        to D:\IMG.001 on Jun 16, 2002 19:51
	19:51:21 Local SafeBack is running on DOS 7.10
	        Source drive 0:
	         Capacity........1628 MB
	         Cylinders.......827
	         Heads...........64
	19:51:21 Partition table for drive 0:
	19:51:29 An unrecoverable file error was reported while writing backup
	        file IMG.001. The session is terminated.
	19:51:34 Backup terminated by user or error on Jun 16, 2002 19:51.
	19:51:36 The backup file is imcomplete and has not been deleted.
	        SafeBack execution ended on Jun 16, 2002 19:51.
	Safeback log: DI-067/SB_067R.TXT
	     SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 19:54.
	19:54:46 Menu selections:
	        Function: Restore
	        Direct access: No
	        Use XBIOS: Auto
	        Adjust partitions: Auto
	        Backfill on restore: Yes
	19:54:53 Backup file created on Jun 16, 2002 19:51
	        by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	        Backup file comment record:
	         DI-067
	19:54:56 Backup file C:\IMG.001 opened for access.
	19:55:07 Restore of drive 0: from C:\IMG.001
	        to drive 1: started on Jun 16, 2002 19:55
	19:55:07 Local SafeBack is running on DOS 7.10
	        Source drive 0:
	         Capacity........1628 MB
	         Cylinders.......827
	         Heads...........64
	        Destination drive 1:
	         Capacity........1628 MB
	         Cylinders.......827
	         Heads...........64
	19:55:15 An unexpected end-of-file occurred while reading IMG.001 for
	the
	        record for sector 37485.
	19:56:25 Restore operation terminated by error or user.
	19:56:29 Menu selections:
	        Function: Restore
	        Direct access: No
	        Use XBIOS: Auto

Case DI-067 for SafeBack 2.18	

	Adjust partitions: Auto
	          Backfill on restore: Yes
	       SafeBack execution ended on Jun 16, 2002 19:56.
	= = = = Measurement Logs = = = =
	Sectors Compared 3335472
	Sectors Differ 3297987
	Diffs range 37485-3335471
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F

Expected Results:	Source disk is unchanged error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-068 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is the same size as the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Sun Nov 04 11:58:04 2001
PC:	Beta4
Disks:	Source: DOS Drive 80 Physical Label B5 Destination: DOS Drive 81 Physical Label B9 Image media: DOS Drive 82 Physical Label BC B5 is a WDC AC21600H with 3173184 sectors B9 is a WDC AC21600H with 3173184 sectors BC is a QUANTUM FIREBALL ST3.2A with 6306048 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B5 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Mon Oct 15 11:18:11 2001 cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log Disk hash = BD4140E6924156E1870E00983701405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-068 Beta4 81 B9 /noask /dst /new_log /comment JRL
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-068 Host C:\IMG.001 9544 AE /comment None Change byte 9544 of file C:\IMG.001 from 0xFFB5 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-068 Beta4 80 /all /new_log /comment JRL(B9) Z:\ss\PARTAB.EXE DI-068 Beta4 81 /all /new_log /comment JRL(B9) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-068 Beta4 80 B5 81 B9 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-068 beta4 80 /comment JRL(B5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-068

Log File
Highlights:
	Safeback log: DI-068/SB_068B.TXT
	     SafeBack 2.18 13Feb01 execution started on Nov 4, 2001 12:10.
	12:10:16 Menu selections:
	         Function: Backup
	         Direct access: No
	         Use XBIOS: No
	         Adjust partitions: No
	         Backfill on restore: No
	12:10:35 Backup file D:\IMG.001 created.
	        Backup file comment record:
	         DI-068
	12:10:41 Backing up drive 0:

Case DI-068 for SafeBack 2.18	
	to D:\IMG.001 on Nov 4, 2001 12:10
	12:10:44 Local SafeBack is running on DOS 6.30
	Source drive 0:
	Capacity........1549 MB
	Cylinders.......787
	Heads...........64
	12:10:44 Partition table for drive 0:
	12:22:54 Backup file CRC: 5d3cb32a.
	12:22:54 Backup of drive 0: completed on Nov 4, 2001 12:22.
	SafeBack execution ended on Nov 4, 2001 12:23.
	Safeback log: DI-068/SB_068R.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 4, 2001 13:36.
	13:36:40 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: No
	Adjust partitions: No
	Backfill on restore: No
	13:36:58 Backup file created on Nov 4, 2001 12:10
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-068
	13:37:01 Backup file C:\IMG.001 opened for access.
	13:37:10 Restore of drive 0: from C:\IMG.001
	to drive 1: started on Nov 4, 2001 13:37
	13:37:10 Partition fixup has been disabled.
	13:37:10 Local SafeBack is running on DOS 6.30
	Source drive 0:
	Capacity........1549 MB
	Cylinders.......787
	Heads...........64
	Destination drive 1:
	Capacity........1549 MB
	Cylinders.......787
	Heads...........64
	13:37:10 IMG.001, record 0 has a CRC error. 83d6 was expected, but 6a42 read.
	13:37:18 Backup file CRC error ignored by recovery at sector 0.
	13:37:23 Data starting at sector 0 and the next 119 sectors is
	questionable due to CRC errors.
	13:51:39 CRC mismatch: Calculated: f68b0bae, Read: 5d3cb32a
	13:52:39 Restore of drive 0: to drive 1: completed on Nov 4, 2001 13:52
	13:52:51 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: No
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Nov 4, 2001 13:52.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 1
	Diffs range 18
	Hash after test: BD4140E6924156E1870E00983701405645359A00
Expected Results:	Source disk is unchanged image verification error
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-069 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk to a BIOS-IDE destination disk where the source disk is the same size as the destination
Tester Name:	JRL
Test Date:	Sat Nov 03 09:12:36 2001
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1

Case DI-069 for SafeBack 2.18	
	Destination: DOS Drive 81 Physical Label D7
	Image media: DOS Drive 82 Physical Label D3
	A1 is a Quantum Sirooco1700A with 3335472 sectors
	D7 is a Quantum Sirooco1700A with 3335472 sectors
	D3 is a Fujitsu MPE3064AT with 12672450 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16
	Disk: A1
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Tue Oct 16 11:24:16 2001
	cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\nex-src.txt
	Load Operating System to Source disk
	cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log
	Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-069 Beta3 81 D7 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-069 Beta3 80 /all /new_log /comment JRL(D7)
	Z:\ss\PARTAB.EXE DI-069 Beta3 81 /all /new_log /comment JRL(D7)
	z:\sb\master (backup to image)
	z:\sb\master (restore from image)
	Z:\ss\DISKCMP.EXE DI-069 Beta3 80 A1 81 D7 /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-069 beta3 80 /comment JRL(A1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-069
Log File Highlights:	Safeback log: DI-069/SB_069B.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 3, 2001 09:24.
	09:24:18 Menu selections:
	Function: Backup
	Direct access: No
	Use XBIOS: No
	Adjust partitions: No
	Backfill on restore: No
	09:24:34 Backup file D:\IMG.001 created.
	Backup file comment record:
	DI-069
	09:24:43 Backing up drive 0:
	to D:\IMG.001 on Nov 3, 2001 09:24
	09:24:45 Local SafeBack is running on DOS 6.30
	Source drive 0:
	Capacity........1628 MB
	Cylinders.......827
	Heads...........64
	09:24:45 Partition table for drive 0:
	09:37:02 Backup file CRC: a56cb1bc.
	09:37:02 Backup of drive 0: completed on Nov 3, 2001 09:37.
	SafeBack execution ended on Nov 3, 2001 09:40.
	Safeback log: DI-069/SB_069R.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 3, 2001 09:43.
	09:43:37 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: No
	Adjust partitions: No
	Backfill on restore: No
	09:43:49 Backup file created on Nov 3, 2001 09:24
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-069
	09:43:52 Backup file C:\IMG.001 opened for access.
	09:44:02 Restore of drive 0: from C:\IMG.001

Case DI-069 for SafeBack 2.18	
	to drive 1: started on Nov 3, 2001 09:44
	09:44:02 Partition fixup has been disabled.
	09:44:02 Local SafeBack is running on DOS 6.30
	Source drive 0:
	Capacity........1628 MB
	Cylinders.......827
	Heads...........64
	Destination drive 1:
	Capacity........1628 MB
	Cylinders.......827
	Heads...........64
	09:55:42 The whole-file CRC verifies: a56cb1bc
	10:13:44 Restore of drive 0: to drive 1: completed on Nov 3, 2001 10:13
	10:13:51 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: No
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Nov 3, 2001 10:13.
	= = = = Measurement Logs = = = =
	Sectors Compared 3335472
	Sectors Differ 1008
	Diffs range 3334464-3335471
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F
Expected Results:	Source disk is unchanged
	src compares equal to dst
Actual Results:	BIOS anomaly
Analysis:	Expected results not achieved

Case DI-070 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk
	to a BIOS-IDE destination disk
	where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Mon Apr 22 07:05:14 2002
PC:	Beta3
Disks:	Source: DOS Drive 80 Physical Label A1
	Destination: DOS Drive 81 Physical Label B9
	Image media: DOS Drive 82 Physical Label DB
	A1 is a Quantum Sirooco1700A with 3335472 sectors
	B9 is a WDC AC21600H with 3173184 sectors
	DB is a Fujitsu MPE3064AT with 12672450 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16
	Disk: A1
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Tue Oct 16 11:24:16 2001
	cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\nex-src.txt
	Load Operating System to Source disk
	cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log
	Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-070 Beta3 81 B9 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-070 Beta3 80 /all /new_log /comment JRL(B9)
	Z:\ss\PARTAB.EXE DI-070 Beta3 81 /all /new_log /comment JRL(B9)
	z:\sb\master (backup to image)
	z:\sb\master (restore from image)
	Z:\ss\DISKCMP.EXE DI-070 Beta3 80 A1 81 B9 /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-070 Beta3 80 /comment JRL(A1) /new_log /after

Case DI-070 for SafeBack 2.18	
Log files loc:	test-archive/sb/sb-2.18/DI-070

Log File Highlights:	Safeback log: DI-070/SB_070B.TXT
	    SafeBack 2.18 13Feb01 execution started on Apr 22, 2002 07:14.
	07:15:20 Menu selections:
	      Function: Backup
	      Direct access: No
	      Use XBIOS: No
	      Adjust partitions: Auto
	      Backfill on restore: Yes
	07:15:38 Backup file D:\IMG.001 created.
	      Backup file comment record:
	       DI-070
	07:15:45 Backing up drive 0:
	      to D:\IMG.001 on Apr 22, 2002 07:15
	07:15:46 Local SafeBack is running on DOS 6.30
	      Source drive 0:
	       Capacity........1628 MB
	       Cylinders.......827
	       Heads...........64
	07:15:46 Partition table for drive 0:
	07:27:59 Backup file CRC: 1ba46258.
	07:27:59 Backup of drive 0: completed on Apr 22, 2002 07:27.
	      SafeBack execution ended on Apr 22, 2002 07:28.
	Safeback log: DI-070/SB_070R.TXT
	    SafeBack 2.18 13Feb01 execution started on Apr 22, 2002 07:31.
	07:31:58 Menu selections:
	      Function: Restore
	      Direct access: No
	      Use XBIOS: No
	      Adjust partitions: Auto
	      Backfill on restore: Yes
	07:32:10 Backup file created on Apr 22, 2002 07:15
	      by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	      Backup file comment record:
	       DI-070
	07:32:12 Backup file C:\IMG.001 opened for access.
	07:32:17 The destination drive capacity is smaller than that of the
	      original source drive.
	07:32:26 Restore of drive 0: from C:\IMG.001
	      to drive 1: started on Apr 22, 2002 07:32
	07:32:26 Local SafeBack is running on DOS 6.30
	      Source drive 0:
	       Capacity........1628 MB
	       Cylinders.......827
	       Heads...........64
	      Destination drive 1:
	       Capacity........1549 MB
	       Cylinders.......787
	       Heads...........64
	07:45:59 Partition table for drive 1:
	07:46:01 Restore of drive 0: to drive 1: completed on Apr 22, 2002 07:46
	08:15:16 Menu selections:
	      Function: Restore
	      Direct access: No
	      Use XBIOS: No
	      Adjust partitions: Auto
	      Backfill on restore: Yes
	      SafeBack execution ended on Apr 22, 2002 08:15.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Source (3335472) has 162288 more sectors than destination (3173184)
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F

Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual	No anomalies

Case DI-070 for SafeBack 2.18	
Results:	
Analysis:	Expected results achieved

Case DI-071 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk to a BIOS-IDE destination disk and the source contains a FAT16 partition where the source disk is smaller than the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Tue Nov 06 15:54:32 2001
PC:	Beta4
Disks:	Source: DOS Drive 80 Physical Label B5 Destination: DOS Drive 81 Physical Label A4 Image media: DOS Drive 82 Physical Label DA B5 is a WDC AC21600H with 3173184 sectors A4 is a Quantum Sirooco1700A with 3335472 sectors DA is a Fujitsu MPE3064AT with 12672450 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B5 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Mon Oct 15 11:18:11 2001 cmd: Z:\ss\DISKWIPE.EXE B5 JudgeDee 80 B5 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE B5 JudgeDee 80 /before /new_log Disk hash = BD4140E6924156E1870E00983701405645359A00
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-071 Beta4 81 A4 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16L-SS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001334529 0000/001/01 0330/063/63 06 Fat16
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-071 Host C:\IMG.001 5922 AE /comment None Change byte 5922 of file C:\IMG.001 from 0x0A to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-071 Beta4 80 /all /new_log /comment JRL(A4) Z:\ss\PARTAB.EXE DI-071 Beta4 81 /all /new_log /comment JRL(A4) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-071 Beta4 80 B5 81 A4 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-071 delta1 80 /comment JRL(B5) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-071
Log File Highlights:	Source disk Drive 0x80, BIOS: Legacy Interrupt 13 bios 0785/063/63 (max cyl/hd values) Interrupt 13 ext 00786/064/63 (number of cyl/hd) 3169152 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16 2 X 001431360 001128960 0355/000/01 0634/063/63 05 extended 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended 5 S 000000063 000145089 0406/001/01 0441/063/63 06 Fat16 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 002560320 000064512 0635/000/01 0650/063/63 83 Linux 10 P 002761920 000411264 0685/000/01 0786/063/63 82 Linux swap Destination disk Drive 0x81, BIOS: Legacy Interrupt 13 bios 0825/063/63 (max cyl/hd values) Interrupt 13 ext 00826/064/63 (number of cyl/hd) 3330432 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type

```
Case DI-071 for SafeBack 2.18
                 1 P 000000063 001334529 0000/001/01 0330/063/63      06 Fat16
                 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
                 Safeback log: DI-071/SB_071B.TXT
                         SafeBack 2.18 13Feb01 execution started on Nov  6, 2001 15:20.
                 15:20:12  Menu selections:
                             Function:           Backup
                             Direct access:      No
                             Use XBIOS:          No
                             Adjust partitions:  No
                             Backfill on restore:  No
                 15:20:33  Backup file D:\IMG.001 created.
                             Backup file comment record:
                               DI-071
                 15:20:44  Backing up drive C:
                             to D:\IMG.001 on Nov  6, 2001 15:20
                 15:20:46  Local SafeBack is running on DOS 6.30
                             Source drive C:
                               Capacity........600 MB
                               Cylinders.......304
                               Heads...........64
                 15:28:07  Backup file CRC: 7a50bbc4.
                 15:28:07  Backup of drive C: completed on Nov  6, 2001 15:28.
                             SafeBack execution ended on Nov  6, 2001 15:29.
                 Safeback log: DI-071/SB_071R.TXT
                         SafeBack 2.18 13Feb01 execution started on Nov  6, 2001 15:33.
                 15:33:48  Menu selections:
                             Function:           Restore
                             Direct access:      No
                             Use XBIOS:          No
                             Adjust partitions:  No
                             Backfill on restore:  No
                 15:34:43  Backup file created on Nov  6, 2001 15:20
                             by Gary Fisher Natl Institute of Standards & Technology
                 Software Diagnostics & Con
                             Backup file comment record:
                               DI-071
                 15:34:50  Backup file C:\IMG.001 opened for access.
                 15:35:08  Partition/Boot information saved to A:\PT.SPS.
                 15:35:10  Restore of drive C: from C:\IMG.001
                             to drive D: started on Nov  6, 2001 15:35
                 15:35:10  Partition fixup has been disabled.
                 15:35:10  Local SafeBack is running on DOS 6.30
                             Source drive C:
                               Capacity........600 MB
                               Cylinders.......304
                               Heads...........64
                             Destination drive D:
                               Capacity.......652 MB
                               Cylinders.......330
                               Heads...........64
                 15:35:11  IMG.001, record 0 has a CRC error. 9f60 was expected, but 8090
                 read.
                 15:39:19  Restore operation terminated by error or user.
                 15:39:23  Menu selections:
                             Function:           Restore
                             Direct access:      No
                             Use XBIOS:          No
                             Adjust partitions:  No
                             Backfill on restore:  No
                 15:39:48  Backup file created on Nov  6, 2001 15:20
                             by Gary Fisher Natl Institute of Standards & Technology
                 Software Diagnostics & Con
                             Backup file comment record:
                               DI-071
                 15:39:52  Backup file C:\IMG.001 opened for access.
                 15:40:02  Partition/Boot information saved to A:\PT.SPS.
                 15:40:03  Restore of drive C: from C:\IMG.001
                             to drive D: started on Nov  6, 2001 15:40
```

Case DI-071 for SafeBack 2.18	
	15:40:03 Partition fixup has been disabled.
	15:40:04 Local SafeBack is running on DOS 6.30
	Source drive C:
	Capacity........600 MB
	Cylinders.......304
	Heads..........64
	Destination drive D:
	Capacity.......652 MB
	Cylinders.......330
	Heads..........64
	15:40:04 IMG.001, record 0 has a CRC error. 9f60 was expected, but 8090 read.
	15:40:08 Backup file CRC error ignored by recovery at sector 0.
	15:40:16 Data starting at sector 0 and the next 119 sectors is questionable due to CRC errors.
	15:46:40 CRC mismatch: Calculated: 0a622327, Read: 7a50bbc4
	15:51:52 Restore of drive C: to drive D: completed on Nov 6, 2001 15:51
	15:52:00 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: No
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Nov 6, 2001 15:52.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 1
	Diffs range: 11
	Source (1229697) has 104832 fewer sectors than destination (1334529)
	Zero fill: 0
	Src Byte fill (B5): 0
	Dst Byte fill (A4): 104832
	Other fill: 0
	Other no fill: 0
	Hash after test: BD4140E6924156E1870E00983701405645359A00
Expected Results:	Source disk is unchanged
	image verification error
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-072 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk
	to a BIOS-IDE destination disk
	and the source contains a FAT32 partition
	where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Tue Nov 27 12:42:03 2001
PC:	Beta7
Disks:	Source: DOS Drive 80 Physical Label F1
	Destination: DOS Drive 81 Physical Label A4
	Image media: DOS Drive 82 Physical Label D3
	F1 is a Quantum Sirooco1700A with 3335472 sectors
	A4 is a Quantum Sirooco1700A with 3335472 sectors
	D3 is a Fujitsu MPE3064AT with 12672450 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32
	Disk: F1
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Fri Nov 16 10:42:33 2001
	cmd: Z:\ss\DISKWIPE.EXE F1 JudgeDee 80 F1 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\f32-src.txt
	Load Operating System to Source disk
	cmd: Z:\ss\DISKHASH.EXE F1 JudgeDee 80 /before /new_log

Case DI-072 for SafeBack 2.18	
	Disk hash = 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-072 Beta7 81 A4 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32L-SS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001334529 0000/001/01 0330/063/63 0B Fat32
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-072 Beta7 80 /all /new_log /comment JRL(A4) Z:\ss\PARTAB.EXE DI-072 Beta7 81 /all /new_log /comment JRL(A4) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-072 Beta7 80 F1 81 A4 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-072 delta1 80 /comment JRL(F1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-072

Log File Highlights:	Source disk Drive 0x80, BIOS: Legacy
	Interrupt 13 bios 0825/063/63 (max cyl/hd values)
	Interrupt 13 ext 00826/064/63 (number of cyl/hd)
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 0B Fat32
	 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended
	 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	 5 S 000000063 000145089 0406/001/01 0441/063/63 0B Fat32
	 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux
	10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Legacy
	Interrupt 13 bios 0825/063/63 (max cyl/hd values)
	Interrupt 13 ext 00826/064/63 (number of cyl/hd)
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001334529 0000/001/01 0330/063/63 0B Fat32
	 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
	Safeback log: DI-072/SB_072B.TXT
	       SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 13:34.
	13:34:25 Menu selections:
	      Function: Backup
	      Direct access: No
	      Use XBIOS: No
	      Adjust partitions: No
	      Backfill on restore: No
	13:34:59 Backup file D:\IMG.001 created.
	      Backup file comment record:
	     DI-072
	13:35:07 Backing up drive C:
	      to D:\IMG.001 on Nov 27, 2001 13:35
	13:35:09 Local SafeBack is running on DOS 7.10
	      Source drive C:
	       Capacity........600 MB
	       Cylinders.......304
	       Heads...........64
	13:38:45 Backup file CRC: bd824e5c.
	13:38:45 Backup of drive C: completed on Nov 27, 2001 13:38.
	      SafeBack execution ended on Nov 27, 2001 13:42.
	Safeback log: DI-072/SB_072R.TXT
	       SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 13:46.
	13:46:26 Menu selections:
	      Function: Restore
	      Direct access: No
	      Use XBIOS: No
	      Adjust partitions: No
	      Backfill on restore: No
	13:46:49 Backup file created on Nov 27, 2001 13:35

Case DI-072 for SafeBack 2.18	

	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	      Backup file comment record:
	        DI-072
	13:46:52 Backup file C:\IMG.001 opened for access.
	13:47:04 Partition/Boot information saved to A:\PT.SPS.
	13:47:05 Restore of drive C: from C:\IMG.001
	        to drive D: started on Nov 27, 2001 13:47
	13:47:05 Partition fixup has been disabled.
	13:47:05 Local SafeBack is running on DOS 7.10
	      Source drive C:
	        Capacity........600 MB
	        Cylinders.......304
	        Heads...........64
	      Destination drive D:
	        Capacity........652 MB
	        Cylinders.......330
	        Heads...........64
	13:52:51 The whole-file CRC verifies: bd824e5c
	13:56:31 Restore of drive C: to drive D: completed on Nov 27, 2001 13:56
	13:56:39 Menu selections:
	        Function: Restore
	        Direct access: No
	        Use XBIOS: No
	        Adjust partitions: No
	        Backfill on restore: No
	      SafeBack execution ended on Nov 27, 2001 13:56.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 1
	Diffs range: 1
	Source (1229697) has 104832 fewer sectors than destination (1334529)
	Zero fill: 0
	Src Byte fill (F1): 0
	Dst Byte fill (A4): 104832
	Other fill: 0
	Other no fill: 0
	Hash after test: 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	FAT32 anomaly, Backfill anomaly
Analysis:	Expected results not achieved

Case DI-081 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk to a BIOS-IDE destination disk and the source contains a FAT32 partition where the source disk is the same size as the destination Introduce a read error reading from the image.
Tester Name:	JRL
Test Date:	Sun Jun 16 12:45:10 2002
PC:	Beta7
Disks:	Source: DOS Drive 80 Physical Label F1 Destination: DOS Drive 81 Physical Label D7 Image media: DOS Drive 80 Physical Label BC F1 is a Quantum Sirooco1700A with 3335472 sectors D7 is a Quantum Sirooco1700A with 3335472 sectors BC is a QUANTUM FIREBALL ST3.2A with 6306048 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32 Disk: F1

Case DI-081 for SafeBack 2.18	
	Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Fri Nov 16 10:42:33 2001 cmd: Z:\ss\DISKWIPE.EXE F1 JudgeDee 80 F1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE F1 JudgeDee 80 /before /new_log Disk hash = 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-081 Beta7 81 D7 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32L-ES.txt See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 80 3 50 50 2 10 > a:\err-081.txt Z:\ss\baddisk 80 3 50 50 10 10 >> a:\err-081.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00002 from disk 00080 at address 00003/00050/00050 return code 00010 on command 00010 from disk 00080 at address 00003/00050/00050
Execute:	z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-081 Beta7 80 F1 81 D7 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-081 Beta7 80 /comment F1(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-081

Log File
Highlights:
	Source disk Drive 0x80, BIOS: Legacy
	Interrupt 13 bios 0825/063/63 (max cyl/hd values)
	Interrupt 13 ext 00826/064/63 (number of cyl/hd)
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 0B Fat32
	 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended
	 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	 5 S 000000063 000145089 0406/001/01 0441/063/63 0B Fat32
	 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux
	10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Legacy
	Interrupt 13 bios 0825/063/63 (max cyl/hd values)
	Interrupt 13 ext 00826/064/63 (number of cyl/hd)
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 0B Fat32
	 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
	Safeback log: DI-081/SB_081B.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 13:12.
	13:12:21 Menu selections:
	            Function: Backup
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	13:12:40 Backup file D:\IMG.001 created.
	            Backup file comment record:
	             DI-081
	13:12:50 Backing up drive C:
	            to D:\IMG.001 on Jun 16, 2002 13:12
	13:12:52 Local SafeBack is running on DOS 7.10
	            Source drive C:
	               Capacity........600 MB

Case DI-081 for SafeBack 2.18	
	Cylinders.......304
	Heads...........64
	13:16:33 Backup file CRC: ce17ce49.
	13:16:33 Backup of drive C: completed on Jun 16, 2002 13:16.
	SafeBack execution ended on Jun 16, 2002 13:17.
	Safeback log: DI-081/SB_081R.TXT
	SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 13:24.
	13:24:08 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	13:24:29 Backup file created on Jun 16, 2002 13:12
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-081
	13:24:33 Backup file C:\IMG.001 opened for access.
	13:24:42 Partition/Boot information saved to A:\PT.SPS.
	13:24:43 Restore of drive C: from C:\IMG.001
	to drive D: started on Jun 16, 2002 13:24
	13:24:43 Local SafeBack is running on DOS 7.10
	Source drive C:
	Capacity........600 MB
	Cylinders.......304
	Heads...........64
	Destination drive D:
	Capacity.......600 MB
	Cylinders.......304
	Heads...........64
	13:28:19 While reading C:\IMG.001 at 13663400, an access denied error occurred on the backup file. A
	data block consisting of zeroes was used in place of the data to
	be read. As a result, another error message will follow this one.
	13:28:19 IMG.001, record 30821 has a CRC error. 3127 was expected, but 2575 read.
	13:28:40 Backup file CRC error ignored by recovery at sector 30821.
	13:29:16 Data starting at sector 30821 and the next 119 sectors is questionable due to CRC errors.
	13:37:13 CRC mismatch: Calculated: 8b9ec084, Read: ce17ce49
	13:37:18 Restore of drive C: to drive D: completed on Jun 16, 2002 13:37
	13:37:25 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	SafeBack execution ended on Jun 16, 2002 13:37.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 120
	Diffs range: 1, 30821-30939
	Hash after test: 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Expected Results:	Source disk is unchanged
	error message logged
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-082 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk
	to a BIOS-IDE destination disk
	and the source contains a FAT16 partition
	where the source disk is the same size as the destination

Case DI-082 for SafeBack 2.18	
	Introduce a write error writing to the image.
Tester Name:	JRL
Test Date:	Sun Jun 16 19:09:26 2002
PC:	Beta6
Disks:	Source: DOS Drive 80 Physical Label A3 Destination: DOS Drive 81 Physical Label D7 Image media: DOS Drive 80 Physical Label BC A3 is a Quantum Sirooco1700A with 3335472 sectors D7 is a Quantum Sirooco1700A with 3335472 sectors BC is a QUANTUM FIREBALL ST3.2A with 6306048 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: A3 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Sat Nov 03 16:01:24 2001 cmd: Z:\ss\DISKWIPE.EXE A3 JudgeDee 80 A3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE A3 JudgeDee 80 /before /new_log Disk hash = 27E36D91D13ADEE11316951CFE492E3C66053191
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-082 Beta6 81 D7 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16L-ES.txt See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 81 9 12 5 3 10 > a:\err-082.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00003 from disk 00081 at address 00009/00012/00005
Execute:	z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-082 Beta6 80 A3 81 D7 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-082 Beta7 80 /comment A3(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-082

Log File
Highlights:
	Source disk Drive 0x80, BIOS: Legacy
	Interrupt 13 bios 0825/063/63 (max cyl/hd values)
	Interrupt 13 ext 00826/064/63 (number of cyl/hd)
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16
	 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended
	 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	 5 S 000000063 000145089 0406/001/01 0441/063/63 06 Fat16
	 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux
	10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Legacy
	Interrupt 13 bios 0825/063/63 (max cyl/hd values)
	Interrupt 13 ext 00826/064/63 (number of cyl/hd)
	3330432 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 06 Fat16
	 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
	Safeback log: DI-082/SB_082B.TXT
	      SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 19:37.
	19:37:34 Menu selections:
	          Function: Backup

Case DI-082 for SafeBack 2.18	
	``` Direct access: No Use XBIOS: Auto Adjust partitions: Auto Backfill on restore: Yes 19:37:53 Backup file D:\IMG.001 created. Backup file comment record: DI-082 19:37:58 Backing up drive C: to D:\IMG.001 on Jun 16, 2002 19:37 19:38:00 Local SafeBack is running on DOS 7.10 Source drive C: Capacity........600 MB Cylinders.......304 Heads...........64 19:38:14 An unrecoverable file error was reported while writing backup file IMG.001. The session is terminated. 19:38:57 Backup terminated by user or error on Jun 16, 2002 19:38. 19:39:11 The backup file is imcomplete and has not been deleted. SafeBack execution ended on Jun 16, 2002 19:39. Safeback log: DI-082/SB_082R.TXT SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 19:44. 19:44:37 Menu selections: Function: Restore Direct access: No Use XBIOS: Auto Adjust partitions: Auto Backfill on restore: Yes 19:44:45 Backup file created on Jun 16, 2002 19:37 by Gary Fisher Natl Institute of Standards & Technology Software Diagnostics & Con Backup file comment record: DI-082 19:44:50 Backup file C:\IMG.001 opened for access. 19:45:06 Partition/Boot information saved to A:\PT.SPS. 19:45:07 Restore of drive C: from C:\IMG.001 to drive D: started on Jun 16, 2002 19:45 19:45:07 Local SafeBack is running on DOS 7.10 Source drive C: Capacity........600 MB Cylinders.......304 Heads...........64 Destination drive D: Capacity........600 MB Cylinders.......304 Heads...........64 19:45:35 An unexpected end-of-file occurred while reading IMG.001 for the record for sector 77231. 19:47:40 Restore operation terminated by error or user. 19:47:43 Menu selections: Function: Restore Direct access: No Use XBIOS: Auto Adjust partitions: Auto Backfill on restore: Yes SafeBack execution ended on Jun 16, 2002 19:47. = = = = Measurement Logs = = = = Sectors Compared 1229697 Sectors Differ 1152466 Diffs range: 77231-1229696 Hash after test: 27E36D91D13ADEE11316951CFE492E3C66053191 ```
Expected Results:	Source disk is unchanged error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-083 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk to a BIOS-IDE destination disk and the source contains a FAT32 partition where the source disk is the same size as the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Tue Nov 27 14:45:56 2001
PC:	Beta7
Disks:	Source: DOS Drive 80 Physical Label F1 Destination: DOS Drive 81 Physical Label A4 Image media: DOS Drive 82 Physical Label D3 F1 is a Quantum Sirooco1700A with 3335472 sectors A4 is a Quantum Sirooco1700A with 3335472 sectors D3 is a Fujitsu MPE3064AT with 12672450 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32 Disk: F1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Fri Nov 16 10:42:33 2001 cmd: Z:\ss\DISKWIPE.EXE F1 JudgeDee 80 F1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE F1 JudgeDee 80 /before /new_log Disk hash = 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-083 Beta7 81 A4 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32L-ES.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 0B Fat32
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-083 Host C:\IMG.001 5861 AE /comment None Change byte 5861 of file C:\IMG.001 from 0x00 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-083 Beta7 80 /all /new_log /comment JRL(A4) Z:\ss\PARTAB.EXE DI-083 Beta7 81 /all /new_log /comment JRL(A4) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-083 Beta7 80 F1 81 A4 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-083 delta1 80 /comment JRL(F1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-083
Log File Highlights:	Source disk Drive 0x80, BIOS: Legacy Interrupt 13 bios 0825/063/63 (max cyl/hd values) Interrupt 13 ext 00826/064/63 (number of cyl/hd) 3330432 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 0B Fat32 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended 5 S 000000063 000145089 0406/001/01 0441/063/63 0B Fat32 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux 10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap Destination disk Drive 0x81, BIOS: Legacy Interrupt 13 bios 0825/063/63 (max cyl/hd values) Interrupt 13 ext 00826/064/63 (number of cyl/hd) 3330432 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 0B Fat32 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

Case DI-083 for SafeBack 2.18	
	Safeback log: DI-083/SB_083B.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 15:18.
	15:18:07 Menu selections:
	Function: Backup
	Direct access: No
	Use XBIOS: No
	Adjust partitions: No
	Backfill on restore: No
	15:18:27 Backup file D:\IMG.001 created.
	Backup file comment record:
	DI-083
	15:18:33 Backing up drive C:
	to D:\IMG.001 on Nov 27, 2001 15:18
	15:18:35 Local SafeBack is running on DOS 7.10
	Source drive C:
	Capacity........600 MB
	Cylinders.......304
	Heads...........64
	15:22:11 Backup file CRC: ddcc46b0.
	15:22:12 Backup of drive C: completed on Nov 27, 2001 15:22.
	SafeBack execution ended on Nov 27, 2001 15:33.
	Safeback log: DI-083/SB_083R.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 15:38.
	15:38:14 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: No
	Adjust partitions: No
	Backfill on restore: No
	15:38:27 Backup file created on Nov 27, 2001 15:18
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-083
	15:38:31 Backup file C:\IMG.001 opened for access.
	15:38:42 Partition/Boot information saved to A:\PT.SPS.
	15:38:44 Restore of drive C: from C:\IMG.001
	to drive D: started on Nov 27, 2001 15:38
	15:38:44 Partition fixup has been disabled.
	15:38:44 Local SafeBack is running on DOS 7.10
	Source drive C:
	Capacity........600 MB
	Cylinders.......304
	Heads...........64
	Destination drive D:
	Capacity........600 MB
	Cylinders.......304
	Heads...........64
	15:38:44 IMG.001, record 0 has a CRC error. 1554 was expected, but 8f6f read.
	15:38:52 Backup file CRC error ignored by recovery at sector 0.
	15:38:59 Data starting at sector 0 and the next 119 sectors is
	questionable due to CRC errors.
	15:44:44 CRC mismatch: Calculated: 43c7bebf, Read: ddcc46b0
	15:50:09 Restore of drive C: to drive D: completed on Nov 27, 2001 15:50
	15:50:18 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: No
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Nov 27, 2001 15:50.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 2
	Diffs range: 1, 10
	Hash after test: 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Expected Results:	Source disk is unchanged image verification error
Actual	FAT32 anomaly

Case DI-083 for SafeBack 2.18	
Results:	
Analysis:	Expected results not achieved

Case DI-089 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk to a BIOS-IDE destination disk and the source contains a FAT32 partition where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Tue Nov 27 11:16:53 2001
PC:	Beta7
Disks:	Source: DOS Drive 80 Physical Label F1 Destination: DOS Drive 81 Physical Label D7 Image media: DOS Drive 82 Physical Label D3 F1 is a Quantum Sirooco1700A with 3335472 sectors D7 is a Quantum Sirooco1700A with 3335472 sectors D3 is a Fujitsu MPE3064AT with 12672450 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32 Disk: F1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Fri Nov 16 10:42:33 2001 cmd: Z:\ss\DISKWIPE.EXE F1 JudgeDee 80 F1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE F1 JudgeDee 80 /before /new_log Disk hash = 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-089 Beta7 81 D7 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32L-BS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001128897 0000/001/01 0279/063/63 0B Fat32
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-089 Beta7 80 /all /new_log /comment JRL(D7) Z:\ss\PARTAB.EXE DI-089 Beta7 81 /all /new_log /comment JRL(D7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-089 Beta7 80 F1 81 D7 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-089 delta1 80 /comment JRL(F1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-089
Log File Highlights:	Source disk Drive 0x80, BIOS: Legacy Interrupt 13 bios 0825/063/63 (max cyl/hd values) Interrupt 13 ext 00826/064/63 (number of cyl/hd) 3330432 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 0B Fat32 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended 5 S 000000063 000145089 0406/001/01 0441/063/63 0B Fat32 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux 10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap Destination disk Drive 0x81, BIOS: Legacy Interrupt 13 bios 0825/063/63 (max cyl/hd values) Interrupt 13 ext 00826/064/63 (number of cyl/hd) 3330432 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001128897 0000/001/01 0279/063/63 0B Fat32 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry

Case DI-089 for SafeBack 2.18	

	` 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`
	`Safeback log: DI-089/SB_089B.TXT`
	`        SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 11:37.`
	`11:37:50  Menu selections:`
	`             Function:          Backup`
	`             Direct access:     No`
	`             Use XBIOS:         No`
	`             Adjust partitions: No`
	`             Backfill on restore:  No`
	`11:38:06  Backup file D:\IMG.001 created.`
	`          Backup file comment record:`
	`            DI-089`
	`11:38:13  Backing up drive C:`
	`          to D:\IMG.001 on Nov 27, 2001 11:38`
	`11:38:15  Local SafeBack is running on DOS 7.10`
	`          Source drive C:`
	`            Capacity........600 MB`
	`            Cylinders.......304`
	`            Heads...........64`
	`11:41:52  Backup file CRC: 71889b5a.`
	`11:41:52  Backup of drive C: completed on Nov 27, 2001 11:41.`
	`          SafeBack execution ended on Nov 27, 2001 11:42.`
	`Safeback log: DI-089/SB_089R.TXT`
	`        SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 11:46.`
	`11:47:03  Menu selections:`
	`             Function:          Restore`
	`             Direct access:     No`
	`             Use XBIOS:         No`
	`             Adjust partitions: No`
	`             Backfill on restore:  No`
	`11:47:18  Backup file created on Nov 27, 2001 11:38`
	`           by Gary Fisher Natl Institute of Standards & Technology`
	`Software Diagnostics & Con`
	`          Backup file comment record:`
	`            DI-089`
	`11:47:25  Backup file C:\IMG.001 opened for access.`
	`11:47:36  The destination drive capacity is smaller than that of the`
	`          original source drive.`
	`11:47:44  Partition/Boot information saved to A:\PT.SPS.`
	`11:47:45  Restore of drive C: from C:\IMG.001`
	`          to drive D: started on Nov 27, 2001 11:47`
	`11:47:45  Partition fixup has been disabled.`
	`11:47:45  Local SafeBack is running on DOS 7.10`
	`          Source drive C:`
	`            Capacity........600 MB`
	`            Cylinders.......304`
	`            Heads...........64`
	`          Destination drive D:`
	`            Capacity........551 MB`
	`            Cylinders.......279`
	`            Heads...........64`
	`11:53:02  Restore of drive C: to drive D: completed on Nov 27, 2001 11:53`
	`11:53:15  Menu selections:`
	`             Function:          Restore`
	`             Direct access:     No`
	`             Use XBIOS:         No`
	`             Adjust partitions: No`
	`             Backfill on restore:  No`
	`          SafeBack execution ended on Nov 27, 2001 11:53.`
	`= = = = Measurement Logs = = = =`
	`Sectors Compared 1128897`
	`Sectors Differ 1`
	`Diffs range:  1`
	`Source (1229697) has 100800 more sectors than destination (1128897)`
	`Hash after test: 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A`

Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual	FAT32 anomaly

Case DI-089 for SafeBack 2.18	
Results:	
Analysis:	Expected results not achieved

Case DI-090 for SafeBack 2.18	
Case Summary:	Create an image from a BIOS-IDE source disk to a BIOS-IDE destination disk and the source contains a FAT16 partition where the source disk is larger than the destination Create the image on a removable medium.
Tester Name:	JRL
Test Date:	Tue Nov 06 16:16:42 2001
PC:	Beta7
Disks:	Source: DOS Drive 80 Physical Label A1 Destination: DOS Drive 81 Physical Label BA Image media: DOS Drive 82 Physical Label Jaz A1 is a Quantum Sirooco1700A with 3335472 sectors BA is a QUANTUM FIREBALL ST3.2A with 6306048 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: A1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Tue Oct 16 11:24:16 2001 cmd: Z:\ss\DISKWIPE.EXE A1 JudgeDee 80 A1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE A1 JudgeDee 80 /before /new_log Disk hash = D0FC573FF774F6897BE520153C9BF770E998428F
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-090 Beta7 81 BA /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16L-BS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001128897 0000/001/01 0139/127/63 06 Fat16
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-090 Beta7 80 /all /new_log /comment JRL(BA) Z:\ss\PARTAB.EXE DI-090 Beta7 81 /all /new_log /comment JRL(BA) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-090 Beta7 80 A1 81 BA /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-090 beta3 80 /comment JRL(A1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-090
Log File Highlights:	Source disk Drive 0x80, BIOS: Legacy Interrupt 13 bios 0825/063/63 (max cyl/hd values) Interrupt 13 ext 00826/064/63 (number of cyl/hd) 3330432 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended 5 S 000000063 000145089 0406/001/01 0441/063/63 06 Fat16 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux 10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap Destination disk Drive 0x81, BIOS: Legacy Interrupt 13 bios 0780/127/63 (max cyl/hd values) Interrupt 13 ext 00781/128/63 (number of cyl/hd) 6297984 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001128897 0000/001/01 0139/127/63 06 Fat16 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry

Case DI-090 for SafeBack 2.18	
	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
	Safeback log: DI-090/SB_090B.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 6, 2001 16:39.
	16:39:25 Menu selections:
	Function: Backup
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: No
	Backfill on restore: No
	16:40:03 Backup file X:\IMG.001 created.
	Backup file comment record:
	Use one cart DI-090
	16:40:28 Backing up drive C:
	to X:\IMG.001 on Nov 6, 2001 16:40
	16:40:30 Local SafeBack is running on DOS 6.30
	Source drive C:
	Capacity........600 MB
	Cylinders.......304
	Heads...........64
	16:49:36 Backup file CRC: a03f0d3d.
	16:49:36 Backup of drive C: completed on Nov 6, 2001 16:49.
	SafeBack execution ended on Nov 6, 2001 16:50.
	Safeback log: DI-090/SB_090R.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 6, 2001 16:53.
	16:53:47 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: No
	Backfill on restore: No
	16:54:05 Backup file volume 1 requested.
	16:54:12 Backup file created on Nov 6, 2001 16:40
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	Use one cart DI-090
	16:54:18 Backup file X:\IMG.001 opened for access.
	16:54:38 The destination drive capacity is smaller than that of the
	original source drive.
	16:54:52 Partition/Boot information saved to A:\PT.SPS.
	16:54:52 Restore of drive C: from X:\IMG.001
	to drive D: started on Nov 6, 2001 16:54
	16:54:52 Partition fixup has been disabled.
	16:54:52 Local SafeBack is running on DOS 6.30
	Source drive C:
	Capacity........600 MB
	Cylinders.......304
	Heads...........64
	Destination drive D:
	Capacity........551 MB
	Cylinders.......139
	Heads...........128
	16:59:56 Restore of drive C: to drive D: completed on Nov 6, 2001 16:59
	17:21:18 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Nov 6, 2001 17:21.
	= = = = Measurement Logs = = = =
	Sectors Compared 1128897
	Sectors Differ 0
	Diffs range:
	Source (1229697) has 100800 more sectors than destination (1128897)
	Hash after test: D0FC573FF774F6897BE520153C9BF770E998428F
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst, src is truncated on dst
	truncation is logged

Case DI-090 for SafeBack 2.18	
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-091 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk to an XBIOS-IDE destination disk where the source disk is smaller than the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Thu Nov 29 13:51:44 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label BB Image media: DOS Drive 82 Physical Label CC B8 is a WDC AC21600H with 3173184 sectors BB is a QUANTUM FIREBALL ST3.2A with 6306048 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-091 Rumpole 81 BB /noask /dst /new_log /comment JRL
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-091 Host D:\IMG.001 2379 AE /comment None Change byte 2379 of file D:\IMG.001 from 0xFFB8 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-091 Rumpole 80 /all /new_log /comment JRL(BB) Z:\ss\PARTAB.EXE DI-091 Rumpole 81 /all /new_log /comment JRL(BB) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-091 Rumpole 80 B8 81 BB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-091 Rumpole 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-091

Log File Highlights:	Safeback log: DI-091/SB_091B.TXT
	    SafeBack 2.18 13Feb01 execution started on Nov 29, 2001 14:19.
	    The tape drive was not used.
	14:19:44 Menu selections:
	      Function: Backup
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	14:20:12 Backup file D:\IMG.001 created.
	    Backup file comment record:
	     DI-091
	14:20:18 Backing up drive 0:
	    to D:\IMG.001 on Nov 29, 2001 14:20
	14:20:19 Local SafeBack is running on DOS 7.10
	    Source drive 0:
	      Capacity........1549 MB
	      Cylinders.......3148
	      Heads...........16
	14:20:19 Partition table for drive 0:
	14:27:47 Backup file CRC: 4f437945.
	14:27:47 Backup of drive 0: completed on Nov 29, 2001 14:27.
	    SafeBack execution ended on Nov 29, 2001 15:59.

Case DI-091 for SafeBack 2.18	
	Safeback log: DI-091/SB_091R.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 29, 2001 16:01.
	The tape drive was not used.
	16:01:30 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	16:01:40 Backup file created on Nov 29, 2001 14:20
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-091
	16:01:42 Backup file D:\IMG.001 opened for access.
	16:01:55 Restore of drive 0: from D:\IMG.001
	to drive 1: started on Nov 29, 2001 16:01
	16:01:55 Partition fixup has been disabled.
	16:01:55 Local SafeBack is running on DOS 7.10
	Source drive 0:
	Capacity........1549 MB
	Cylinders.......3148
	Heads...........16
	Destination drive 1:
	Capacity........3079 MB
	Cylinders.......6256
	Heads...........16
	16:01:55 IMG.001, record 0 has a CRC error. 25ce was expected, but 47bc
	read.
	16:01:59 Backup file CRC error ignored by recovery at sector 0.
	16:02:04 Data starting at sector 0 and the next 119 sectors is
	questionable due to CRC errors.
	16:07:37 CRC mismatch: Calculated: 04627298, Read: 4f437945
	08:36:29 Restore of drive 0: to drive 1: completed on Nov 30, 2001 08:36
	08:36:43 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Nov 30, 2001 08:36.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 1
	Diffs range 4
	Source (3173184) has 3132864 fewer sectors than destination (6306048)
	Zero fill: 3132864
	Src Byte fill (B8): 0
	Dst Byte fill (BB): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Expected Results:	Source disk is unchanged image verification error
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-092 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk
	to an XBIOS-IDE destination disk
	where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Thu Nov 29 10:47:33 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8
	Destination: DOS Drive 81 Physical Label BB
	Image media: DOS Drive 82 Physical Label CC
	B8 is a WDC AC21600H with 3173184 sectors

Case DI-092 for SafeBack 2.18	
	BB is a QUANTUM FIREBALL ST3.2A with 6306048 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-092 Rumpole 81 BB /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-092 Rumpole 80 /all /new_log /comment JRL(BB) Z:\ss\PARTAB.EXE DI-092 Rumpole 81 /all /new_log /comment JRL(BB) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-092 Rumpole 80 B8 81 BB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-092 Rumpole 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-092

Log File
Highlights:
	Safeback log: DI-092/SB_092B.TXT
	    SafeBack 2.18 13Feb01 execution started on Nov 29, 2001 10:59.
	    The tape drive was not used.
	10:59:32 Menu selections:
	      Function: Backup
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	11:00:28 Menu selections:
	      Function: Backup
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	11:00:42 Backup file D:\IMG.001 created.
	    Backup file comment record:
	      DI-092
	11:00:49 Backing up drive 0:
	    to D:\IMG.001 on Nov 29, 2001 11:00
	11:00:49 Local SafeBack is running on DOS 7.10
	    Source drive 0:
	      Capacity........1549 MB
	      Cylinders.......3148
	      Heads...........16
	11:00:50 Partition table for drive 0:
	11:08:18 Backup file CRC: a3a50a2a.
	11:08:18 Backup of drive 0: completed on Nov 29, 2001 11:08.
	    SafeBack execution ended on Nov 29, 2001 11:10.
	Safeback log: DI-092/SB_092R.TXT
	    SafeBack 2.18 13Feb01 execution started on Nov 29, 2001 11:11.
	    The tape drive was not used.
	11:11:50 Menu selections:
	      Function: Restore
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	11:12:00 Backup file created on Nov 29, 2001 11:00
	    by Gary Fisher Natl Institute of Standards & Technology

Case DI-092 for SafeBack 2.18	
	Software Diagnostics & Con
	Backup file comment record:
	DI-092
	11:12:02 Backup file D:\IMG.001 opened for access.
	11:12:32 Restore of drive 0: from D:\IMG.001
	to drive 1: started on Nov 29, 2001 11:12
	11:12:32 Partition fixup has been disabled.
	11:12:32 Local SafeBack is running on DOS 7.10
	Source drive 0:
	Capacity........1549 MB
	Cylinders.......3148
	Heads...........16
	Destination drive 1:
	Capacity........3079 MB
	Cylinders.......6256
	Heads...........16
	11:18:04 The whole-file CRC verifies: a3a50a2a
	11:21:58 Restore of drive 0: to drive 1: completed on Nov 29, 2001 11:21
	11:22:59 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Nov 29, 2001 11:23.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Source (3173184) has 3132864 fewer sectors than destination (6306048)
	Zero fill: 3132864
	Src Byte fill (B8): 0
	Dst Byte fill (BB): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-093 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk to an XBIOS-IDE destination disk where the source disk is the same size as the destination Introduce a read error from the source.
Tester Name:	JRL
Test Date:	Tue Nov 27 08:19:00 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label CC B8 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk

Case DI-093 for SafeBack 2.18	
	cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-093 Rumpole 81 B7 /noask /dst /new_log /comment JRL
Error Setup:	Z:\ss\badx13 80 42 10 7895 > a:\err-093.txt Version 3.1 Created 10/11/01 at 12:41:45 badx13 compiled on 10/11/01 at 12:43:21 Return error code 10 for X13 command 42 from drive 80 at LBA sector 7,895
Execute:	Z:\ss\PARTAB.EXE DI-093 Rumpole 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-093 Rumpole 81 /all /new_log /comment JRL(B7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-093 Rumpole 80 B8 81 B7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-093 Rumpole 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-093

Log File Highlights:	Safeback log: DI-093/SB_093B.TXT
	          SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 08:55.
	          The tape drive was not used.
	08:55:22 Menu selections:
	              Function: Backup
	              Direct access: No
	              Use XBIOS: Yes
	              Adjust partitions: No
	              Backfill on restore: No
	08:55:43 Backup file D:\IMG.001 created.
	          Backup file comment record:
	            DI-093
	08:55:50 Backing up drive 0:
	          to D:\IMG.001 on Nov 27, 2001 08:55
	08:55:51 Local SafeBack is running on DOS 7.10
	          Source drive 0:
	            Capacity........1549 MB
	            Cylinders.......3148
	            Heads...........16
	08:55:51 Partition table for drive 0:
	08:55:52 While reading drive 0: a sector flagged bad error (status 0a) occurred:
	          at relative sector 7895 (Cylinder 7, Head 13, Sector 21)
	09:03:20 Backup file CRC: 91056b0f.
	09:03:22 Backup of drive 0: completed on Nov 27, 2001 09:03.
	          SafeBack execution ended on Nov 27, 2001 09:07.
	Safeback log: DI-093/SB_093R.TXT
	          SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 09:11.
	          The tape drive was not used.
	09:11:21 Menu selections:
	              Function: Restore
	              Direct access: No
	              Use XBIOS: Yes
	              Adjust partitions: No
	              Backfill on restore: No
	09:11:32 Backup file created on Nov 27, 2001 08:55
	           by Gary Fisher Natl Institute of Standards & Technology Software Diagnostics & Con
	          Backup file comment record:
	            DI-093
	09:11:35 Backup file D:\IMG.001 opened for access.
	09:11:51 Restore of drive 0: from D:\IMG.001
	          to drive 1: started on Nov 27, 2001 09:11
	09:11:51 Partition fixup has been disabled.
	09:11:51 Local SafeBack is running on DOS 7.10
	          Source drive 0:
	            Capacity........1549 MB
	            Cylinders.......3148
	            Heads...........16
	          Destination drive 1:
	            Capacity........1549 MB
	            Cylinders.......3148
	            Heads...........16

Case DI-093 for SafeBack 2.18	

	09:11:53 The image for 0: shows that a sector flagged bad error (status 0a) occurred
	          during backup at relative sector 7895 (Cylinder 7, Head 13, Sector 21)
	09:19:26 The whole-file CRC verifies: 91056b0f
	09:19:26 Restore of drive 0: to drive 1: completed on Nov 27, 2001 09:19
	09:20:28 Menu selections:
	                Function: Restore
	                Direct access: No
	                Use XBIOS: Yes
	                Adjust partitions: No
	                Backfill on restore: No
	            SafeBack execution ended on Nov 27, 2001 09:20.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 1
	Diffs range 7895
	Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2

Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-094 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk to an XBIOS-IDE destination disk where the source disk is the same size as the destination Introduce a write error to the destination.
Tester Name:	JRL
Test Date:	Tue Nov 27 11:28:48 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label CC B8 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-094 Rumpole 81 B7 /noask /dst /new_log /comment JRL
Error Setup:	Z:\ss\badx13 81 43 10 6381 > a:\err-094.txt Version 3.1 Created 10/11/01 at 12:41:45 badx13 compiled on 10/11/01 at 12:43:21 Return error code 10 for X13 command 43 from drive 81 at LBA sector 6,381
Execute:	Z:\ss\PARTAB.EXE DI-094 Rumpole 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-094 Rumpole 81 /all /new_log /comment JRL(B7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-094 Rumpole 80 B8 81 B7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-094 Rumpole 80 /comment JRL(B8) /new_log /after
Log files	test-archive/sb/sb-2.18/DI-094

Case DI-094 for SafeBack 2.18	
loc:	
Log File Highlights:	Safeback log: DI-094/SB_094B.TXT 　　　　　SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 11:40. 　　　　　The tape drive was not used. 11:40:32　Menu selections: 　　　　　　Function:　　　　　　Backup 　　　　　　Direct access:　　　No 　　　　　　Use XBIOS:　　　　　Yes 　　　　　　Adjust partitions:　No 　　　　　　Backfill on restore:　No 11:40:56　Backup file D:\IMG.001 created. 　　　　　Backup file comment record: 　　　　　　DI-094 11:41:02　Backing up drive 0: 　　　　　　to D:\IMG.001 on Nov 27, 2001 11:41 11:41:03　Local SafeBack is running on DOS 7.10 　　　　　Source drive 0: 　　　　　　Capacity........1549 MB 　　　　　　Cylinders.......3148 　　　　　　Heads...........16 11:41:03　Partition table for drive 0: 11:48:32　Backup file CRC: 4cdfe8f9. 11:48:32　Backup of drive 0: completed on Nov 27, 2001 11:48. 　　　　　SafeBack execution ended on Nov 27, 2001 12:22. Safeback log: DI-094/SB_094R.TXT 　　　　　SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 12:23. 　　　　　The tape drive was not used. 12:23:51　Menu selections: 　　　　　　Function:　　　　　　Restore 　　　　　　Direct access:　　　No 　　　　　　Use XBIOS:　　　　　Yes 　　　　　　Adjust partitions:　No 　　　　　　Backfill on restore:　No 12:24:33　Backup file created on Nov 27, 2001 11:41 　　　　　　by Gary Fisher Natl Institute of Standards & Technology Software Diagnostics & Con 　　　　　Backup file comment record: 　　　　　　DI-094 12:24:38　Backup file D:\IMG.001 opened for access. 12:24:55　Restore of drive 0: from D:\IMG.001 　　　　　　to drive 1: started on Nov 27, 2001 12:24 12:24:55　Partition fixup has been disabled. 12:24:55　Local SafeBack is running on DOS 7.10 　　　　　Source drive 0: 　　　　　　Capacity........1549 MB 　　　　　　Cylinders.......3148 　　　　　　Heads...........16 　　　　　Destination drive 1: 　　　　　　Capacity........1549 MB 　　　　　　Cylinders.......3148 　　　　　　Heads...........16 12:24:56　While writing drive 1:, a sector flagged bad error (status 0a) occurred 　　　　　　at relative sector 6381 (Cylinder 6, Head 5, Sector 19) 12:32:30　The whole-file CRC verifies:　4cdfe8f9 12:32:41　Restore of drive 0: to drive 1: completed on Nov 27, 2001 12:32 12:32:53　Menu selections: 　　　　　　Function:　　　　　　Restore 　　　　　　Direct access:　　　No 　　　　　　Use XBIOS:　　　　　Yes 　　　　　　Adjust partitions:　No 　　　　　　Backfill on restore:　No 　　　　　SafeBack execution ended on Nov 27, 2001 12:32. = = = = Measurement Logs = = = = Sectors Compared 3173184 Sectors Differ 45 Diffs range 6381-6425 Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Expected Results:	Source disk is unchanged src compares qualified equal to dst

Case DI-094 for SafeBack 2.18	
	error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-097 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk to an XBIOS-IDE destination disk where the source disk is the same size as the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Mon Dec 03 10:11:46 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label CC B8 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-097 Rumpole 81 B7 /noask /dst /new_log /comment JRL
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-097 Host D:\IMG.001 2395 AE /comment None Change byte 2395 of file D:\IMG.001 from 0xFFB8 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-097 Rumpole 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-097 Rumpole 81 /all /new_log /comment JRL(B7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-097 Rumpole 80 B8 81 B7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-097 Rumpole 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-097

Log File Highlights:	Safeback log: DI-097/SB_097B.TXT
	       SafeBack 2.18 13Feb01 execution started on Dec 3, 2001 10:27.
	       The tape drive was not used.
	10:27:43 Menu selections:
	      Function: Backup
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	10:28:09 Backup file D:\IMG.001 created.
	       Backup file comment record:
	        DI-097
	10:28:19 Backing up drive 0:
	       to D:\IMG.001 on Dec 3, 2001 10:28
	10:28:20 Local SafeBack is running on DOS 7.10
	       Source drive 0:
	        Capacity........1549 MB
	        Cylinders.......3148
	        Heads...........16
	10:28:20 Partition table for drive 0:
	10:35:48 Backup file CRC: 3a1d33b9.

Case DI-097 for SafeBack 2.18	

	10:35:48 Backup of drive 0: completed on Dec 3, 2001 10:35.
	          SafeBack execution ended on Dec 3, 2001 10:39.
	Safeback log: DI-097/SB_097R.TXT
	          SafeBack 2.18 13Feb01 execution started on Dec 3, 2001 10:40.
	          The tape drive was not used.
	10:40:21 Menu selections:
	              Function: Restore
	              Direct access: No
	              Use XBIOS: Yes
	              Adjust partitions: No
	              Backfill on restore: No
	10:40:35 Backup file created on Dec 3, 2001 10:28
	           by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	              Backup file comment record:
	               DI-097
	10:40:36 Backup file D:\IMG.001 opened for access.
	10:40:54 Restore of drive 0: from D:\IMG.001
	          to drive 1: started on Dec 3, 2001 10:40
	10:40:54 Partition fixup has been disabled.
	10:40:54 Local SafeBack is running on DOS 7.10
	          Source drive 0:
	            Capacity........1549 MB
	            Cylinders.......3148
	            Heads...........16
	          Destination drive 1:
	            Capacity........1549 MB
	            Cylinders.......3148
	            Heads...........16
	10:40:54 IMG.001, record 0 has a CRC error. 6a96 was expected, but 47bc read.
	10:41:01 Backup file CRC error ignored by recovery at sector 0.
	10:41:03 Data starting at sector 0 and the next 119 sectors is
	          questionable due to CRC errors.
	10:48:39 CRC mismatch: Calculated: 4321c445, Read: 3a1d33b9
	10:59:39 Restore of drive 0: to drive 1: completed on Dec 3, 2001 10:59
	10:59:47 Menu selections:
	              Function: Restore
	              Direct access: No
	              Use XBIOS: Yes
	              Adjust partitions: No
	              Backfill on restore: No
	          SafeBack execution ended on Dec 3, 2001 10:59.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 1
	Diffs range 4
	Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2

Expected Results:	Source disk is unchanged image verification error
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-098 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk to an XBIOS-IDE destination disk where the source disk is the same size as the destination
Tester Name:	JRL
Test Date:	Mon Dec 03 08:41:37 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label CC B8 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2

Case DI-098 for SafeBack 2.18	
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-098 Rumpole 81 B7 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-098 Rumpole 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-098 Rumpole 81 /all /new_log /comment JRL(B7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-098 Rumpole 80 B8 81 B7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-098 Rumpole 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-098

Log File Highlights:	Safeback log: DI-098/SB_098B.TXT
	     SafeBack 2.18 13Feb01 execution started on Dec 3, 2001 08:55.
	     The tape drive was not used.
	08:55:29 Menu selections:
	     Function: Backup
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	08:56:16 Backup file D:\IMG.001 created.
	     Backup file comment record:
	      DI-098
	08:56:25 Backing up drive 0:
	     to D:\IMG.001 on Dec 3, 2001 08:56
	08:56:26 Local SafeBack is running on DOS 7.10
	     Source drive 0:
	      Capacity........1549 MB
	      Cylinders.......3148
	      Heads...........16
	08:56:26 Partition table for drive 0:
	09:03:55 Backup file CRC: 760cf5e2.
	09:03:55 Backup of drive 0: completed on Dec 3, 2001 09:03.
	     SafeBack execution ended on Dec 3, 2001 09:24.
	Safeback log: DI-098/SB_098R.TXT
	     SafeBack 2.18 13Feb01 execution started on Dec 3, 2001 09:25.
	     The tape drive was not used.
	09:25:50 Menu selections:
	     Function: Restore
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	09:26:00 Backup file created on Dec 3, 2001 08:56
	     by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	     Backup file comment record:
	      DI-098
	09:26:03 Backup file D:\IMG.001 opened for access.
	09:26:20 Restore of drive 0: from D:\IMG.001
	     to drive 1: started on Dec 3, 2001 09:26
	09:26:20 Partition fixup has been disabled.
	09:26:20 Local SafeBack is running on DOS 7.10
	     Source drive 0:
	      Capacity........1549 MB
	      Cylinders.......3148

Case DI-098 for SafeBack 2.18	
	Heads..........16
	Destination drive 1:
	Capacity........1549 MB
	Cylinders.......3148
	Heads..........16
	09:33:58 The whole-file CRC verifies: 760cf5e2
	09:36:58 Restore of drive 0: to drive 1: completed on Dec 3, 2001 09:36
	09:37:11 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Dec 3, 2001 09:37.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Expected Results:	Source disk is unchanged
	src compares equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-099 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk
	to an XBIOS-IDE destination disk
	where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Tue Dec 04 13:59:25 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label F6
	Destination: DOS Drive 81 Physical Label A5
	Image media: DOS Drive 82 Physical Label CC
	F6 is an IBM-DTLA-307020 with 40188960 sectors
	A5 is a WDC WD200BB-00AUA1 with 39102336 sectors
	CC is a SEAGATE ST336705LC with 71687370 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32
	Disk: F6
	Host: Wimsey
	Operator: JRL
	OS: Windows 2000
	Date: Sat Jul 21 15:53:12 2001
	DISKWIPE.EXE F6_SRC Wimsey 80 F6 /src /new_log /noask /comment Windows
	2000/NT source
	X:\pm\pqmagic /cmd=X:\pm\nt-src.txt
	Load Operating System to Source disk
	DISKHASH.EXE LX-27 Morse 80 /before
	Disk hash = 8034683D5D55BA51409AC7B5CB0845CA2CF6B235
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-099 Cadfael 81 A5 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-099 Cadfael 80 /all /new_log /comment JRL(A5)
	Z:\ss\PARTAB.EXE DI-099 Cadfael 81 /all /new_log /comment JRL(A5)
	z:\sb\master (backup to image)
	z:\sb\master (restore from image)
	Z:\ss\DISKCMP.EXE DI-099 Cadfael 80 F6 81 A5 /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-099 Cadfael 80 /comment JRL(F6) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-099
Log File Highlights:	Safeback log: DI-099/SB_099B.TXT
	SafeBack 2.18 13Feb01 execution started on Dec 4, 2001 15:23.
	15:23:40 Menu selections:

```
Case DI-099 for SafeBack 2.18
                       Function:           Backup
                       Direct access:      No
                       Use XBIOS:          Yes
                       Adjust partitions:  No
                       Backfill on restore: No
              15:24:57  Backup file H:\IMG.001 created.
                       Backup file comment record:
                         DI-099
              15:25:04  Backing up drive 0:
                         to H:\IMG.001 on Dec  4, 2001 15:25
              15:25:05  Local SafeBack is running on DOS 7.10
                       Source drive 0:
                         Capacity........19624 MB
                         Cylinders.......2501
                         Heads...........255
              15:25:05  Partition table for drive 0:
              15:30:51  Backup file H:\IMG.002 created.
              15:36:36  Backup file H:\IMG.003 created.
              15:42:20  Backup file H:\IMG.004 created.
              15:48:04  Backup file H:\IMG.005 created.
              15:53:49  Backup file H:\IMG.006 created.
              15:59:34  Backup file H:\IMG.007 created.
              16:05:19  Backup file H:\IMG.008 created.
              16:11:05  Backup file H:\IMG.009 created.
              16:16:51  Backup file H:\IMG.010 created.
              16:20:19  Backup file CRC: b14c4c88.
              16:20:21  Backup of drive 0: completed on Dec  4, 2001 16:20.
                       SafeBack execution ended on Dec  4, 2001 17:37.
              Safeback log: DI-099/SB_099R.TXT
                       SafeBack 2.18 13Feb01 execution started on Dec  4, 2001 17:39.
              17:39:18  Menu selections:
                       Function:           Restore
                       Direct access:      No
                       Use XBIOS:          Yes
                       Adjust partitions:  No
                       Backfill on restore: No
              17:39:33  Backup file created on Dec  4, 2001 15:25
                       by Gary Fisher Natl Institute of Standards & Technology
              Software Diagnostics & Con
                       Backup file comment record:
                         DI-099
              17:39:34  Backup file H:\IMG.001 opened for access.
              17:40:17  The destination drive capacity is smaller than that of the
                       original source drive.
              17:40:28  Restore of drive 0: from H:\IMG.001
                         to drive 1: started on Dec  4, 2001 17:40
              17:40:28  Partition fixup has been disabled.
              17:40:28  Local SafeBack is running on DOS 7.10
                       Source drive 0:
                         Capacity........19624 MB
                         Cylinders.......2501
                         Heads...........255
                       Destination drive 1:
                         Capacity........19093 MB
                         Cylinders.......2434
                         Heads...........255
              17:46:19  Backup file H:\IMG.002 opened for access.
              17:52:08  Backup file H:\IMG.003 opened for access.
              17:57:57  Backup file H:\IMG.004 opened for access.
              18:03:46  Backup file H:\IMG.005 opened for access.
              18:09:35  Backup file H:\IMG.006 opened for access.
              18:15:28  Backup file H:\IMG.007 opened for access.
              18:21:17  Backup file H:\IMG.008 opened for access.
              18:27:06  Backup file H:\IMG.009 opened for access.
              18:32:55  Backup file H:\IMG.010 opened for access.
              18:34:55  Restore of drive 0: to drive 1: completed on Dec  4, 2001 18:34
              18:39:19  Menu selections:
                       Function:           Restore
                       Direct access:      No
                       Use XBIOS:          Yes
```

Case DI-099 for SafeBack 2.18	
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Dec 4, 2001 18:39.
	= = = = Measurement Logs = = = =
	Sectors Compared 39102336
	Sectors Differ 0
	Diffs range
	Source (40188960) has 1086624 more sectors than destination (39102336)
	Hash after test: 8034683D5D55BA51409AC7B5CB0845CA2CF6B235
Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-100 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk to an XBIOS-IDE destination disk and the source contains a FAT16 partition where the source disk is smaller than the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Mon Dec 10 07:54:41 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label CC B8 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-100 Rumpole 81 B7 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16X-SS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001334529 0000/001/01 0330/063/63 06 Fat16
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-100 Host E:\IMG.001 639 AE /comment None Change byte 639 of file E:\IMG.001 from 0x56 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-100 Rumpole 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-100 Rumpole 81 /all /new_log /comment JRL(B7) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-100 Rumpole 80 B8 81 B7 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-100 Rumpole 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-100
Log File Highlights:	Source disk Drive 0x80, BIOS: Extensions Present Interrupt 13 bios 0786/063/63 (max cyl/hd values) Interrupt 13 ext 03148/016/63 (number of cyl/hd) 3173184 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16 2 X 001431360 001128960 0355/000/01 0634/063/63 05 extended

```
Case DI-100 for SafeBack 2.18
           3 S 000000063 000205569 0355/001/01 0405/063/63      83 Linux
           4 x 000205632 000145152 0406/000/01 0441/063/63      05 extended
           5 S 000000063 000145089 0406/001/01 0441/063/63      06 Fat16
           6 x 000762048 000185472 0544/000/01 0589/063/63      05 extended
           7 S 000000063 000185409 0544/001/01 0589/063/63      16 other
           8 S 000000000 000000000 0000/000/00 0000/000/00      00 empty entry
           9 P 002560320 000064512 0635/000/01 0650/063/63      83 Linux
          10 P 002761920 000411264 0685/000/01 0786/063/63      82 Linux swap
          Destination disk Drive 0x81, BIOS: Extensions Present
          Interrupt 13  bios  0786/063/63 (max cyl/hd values)
          Interrupt 13  ext   03148/016/63 (number of cyl/hd)
          3173184 total number of sectors reported via interrupt 13 from the BIOS
           N   Start LBA Length    Start C/H/S End C/H/S   boot Partition type
           1 P 000000063 001334529 0000/001/01 0330/063/63      06 Fat16
           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
          Safeback log: DI-100/SB_100.TXT
                    SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 08:05.
                    The tape drive was not used.
          08:05:35  Menu selections:
                       Function:          Backup
                       Direct access:     No
                       Use XBIOS:         Yes
                       Adjust partitions: No
                       Backfill on restore:  No
          08:07:25  Backup file E:\IMG.001 created.
                    Backup file comment record:
                       DI-100
          08:07:30  Backing up drive C:
                    to E:\IMG.001 on Dec 10, 2001 08:07
          08:07:31  Local SafeBack is running on DOS 7.10
                    Source drive C:
                       Capacity........600 MB
                       Cylinders.......304
                       Heads...........64
          08:10:25  Backup file CRC: 91255045.
          08:10:25  Backup of drive C: completed on Dec 10, 2001 08:10.
                    SafeBack execution ended on Dec 10, 2001 08:10.
          Safeback log: DI-100/SB_100R.TXT
                    SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 08:18.
                    The tape drive was not used.
          08:18:38  Menu selections:
                       Function:          Restore
                       Direct access:     No
                       Use XBIOS:         Yes
                       Adjust partitions: No
                       Backfill on restore:  No
          08:18:51  Backup file created on Dec 10, 2001 08:07
                    by Gary Fisher Natl Institute of Standards & Technology
          Software Diagnostics & Con
                    Backup file comment record:
                       DI-100
          08:18:55  Backup file E:\IMG.001 opened for access.
          08:19:20  Partition/Boot information saved to A:\PT.SPS.
          08:19:21  Restore of drive C: from E:\IMG.001
                    to drive D: started on Dec 10, 2001 08:19
          08:19:21  Partition fixup has been disabled.
          08:19:21  Local SafeBack is running on DOS 7.10
                    Source drive C:
                       Capacity........600 MB
                       Cylinders.......304
                       Heads...........64
                    Destination drive D:
                       Capacity........652 MB
                       Cylinders.......330
                       Heads...........64
          08:19:21  IMG.001, record 0 has a CRC error. 4d38 was expected, but d70f
          read.
          08:19:26  Backup file CRC error ignored by recovery at sector 0.
```

Case DI-100 for SafeBack 2.18	

	08:19:29 Data starting at sector 0 and the next 119 sectors is
	          questionable due to CRC errors.
	08:22:40 CRC mismatch: Calculated: 45c4af2b, Read: 91255045
	08:24:01 Restore of drive C: to drive D: completed on Dec 10, 2001 08:24
	08:24:06 Menu selections:
	              Function: Restore
	              Direct access: No
	              Use XBIOS: Yes
	              Adjust partitions: No
	              Backfill on restore: No
	          SafeBack execution ended on Dec 10, 2001 08:24.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 1
	Diffs range: 0
	Source (1229697) has 104832 fewer sectors than destination (1334529)
	Zero fill: 0
	Src Byte fill (B8): 0
	Dst Byte fill (B7): 104832
	Other fill: 0
	Other no fill: 0
	Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2

Expected Results:	Source disk is unchanged image verification error
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-101 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk to an XBIOS-IDE destination disk and the source contains a FAT32 partition where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Fri Dec 14 08:44:50 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label F1 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label CC F1 is a Quantum Sirooco1700A with 3335472 sectors B7 is a WDC AC21600H with 3173184 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32 Disk: F1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Fri Nov 16 10:42:33 2001 cmd: Z:\ss\DISKWIPE.EXE F1 JudgeDee 80 F1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE F1 JudgeDee 80 /before /new_log Disk hash = 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-101 Rumpole 81 B7 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32X-SS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001334529 0000/001/01 0330/063/63 0B Fat32
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-101 Rumpole 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-101 Rumpole 81 /all /new_log /comment JRL(B7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-101 Rumpole 80 F1 81 B7 /new_log /comment JRL /select 1 1

```
Case DI-101 for SafeBack 2.18
            Z:\ss\DISKHASH.EXE DI-101 Rumpole 80 /comment JRL(F1) /new_log /after
Log files   test-archive/sb/sb-2.18/DI-101
loc:
Log File    Source disk Drive 0x80, BIOS: Extensions Present
Highlights: Interrupt 13  bios  0826/063/63 (max cyl/hd values)
            Interrupt 13  ext   03309/016/63 (number of cyl/hd)
            3335472 total number of sectors reported via interrupt 13 from the BIOS
             N   Start LBA Length    Start C/H/S End C/H/S   boot Partition type
             1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 0B Fat32
             2 X 001431360 001290240 0355/000/01 0674/063/63      05 extended
             3 S 000000063 000205569 0355/001/01 0405/063/63      83 Linux
             4 x 000205632 000145152 0406/000/01 0441/063/63      05 extended
             5 S 000000063 000145089 0406/001/01 0441/063/63      0B Fat32
             6 x 000762048 000185472 0544/000/01 0589/063/63      05 extended
             7 S 000000063 000185409 0544/001/01 0589/063/63      16 other
             8 S 000000000 000000000 0000/000/00 0000/000/00      00 empty entry
             9 P 002721600 000064512 0675/000/01 0690/063/63      83 Linux
            10 P 002923200 000411264 0725/000/01 0826/063/63      82 Linux swap
            Destination disk Drive 0x81, BIOS: Extensions Present
            Interrupt 13  bios  0786/063/63 (max cyl/hd values)
            Interrupt 13  ext   03148/016/63 (number of cyl/hd)
            3173184 total number of sectors reported via interrupt 13 from the BIOS
             N   Start LBA Length    Start C/H/S End C/H/S   boot Partition type
             1 P 000000063 001334529 0000/001/01 0330/063/63      0B Fat32
             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
            Safeback log: DI-101/SB_101B.TXT
                     SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 08:55.
                     The tape drive was not used.
            08:55:41  Menu selections:
                     Function:          Backup
                     Direct access:     No
                     Use XBIOS:         Yes
                     Adjust partitions: No
                     Backfill on restore: No
            08:56:15  Backup file E:\IMG.001 created.
                     Backup file comment record:
                     DI-101
            08:56:22  Backing up drive C:
                     to E:\IMG.001 on Dec 14, 2001 08:56
            08:56:23  Local SafeBack is running on DOS 7.10
                     Source drive C:
                       Capacity........600 MB
                       Cylinders.......304
                       Heads...........64
            08:58:40  Backup file CRC: bd08777b.
            08:58:40  Backup of drive C: completed on Dec 14, 2001 08:58.
                     SafeBack execution ended on Dec 14, 2001 08:59.
            Safeback log: DI-101/SB_101R.TXT
                     SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 08:59.
                     The tape drive was not used.
            09:00:10  Menu selections:
                     Function:          Restore
                     Direct access:     No
                     Use XBIOS:         Yes
                     Adjust partitions: No
                     Backfill on restore: No
            09:00:24  Backup file created on Dec 14, 2001 08:56
                      by Gary Fisher Natl Institute of Standards & Technology
            Software Diagnostics & Con
                     Backup file comment record:
                       DI-101
            09:00:25  Backup file E:\IMG.001 opened for access.
            09:00:48  Partition/Boot information saved to A:\PT.SPS.
            09:00:48  Restore of drive C: from E:\IMG.001
                     to drive D: started on Dec 14, 2001 09:00
            09:00:48  Partition fixup has been disabled.
            09:00:48  Local SafeBack is running on DOS 7.10
                     Source drive C:
```

Case DI-101 for SafeBack 2.18	
	Capacity........600 MB
	Cylinders.......304
	Heads...........64
	Destination drive D:
	Capacity........652 MB
	Cylinders.......330
	Heads...........64
	09:03:55 The whole-file CRC verifies: bd08777b
	09:03:55 Restore of drive C: to drive D: completed on Dec 14, 2001 09:03
	09:20:52 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Dec 14, 2001 09:20.
	= = = = Measurement Logs = = = =
	Sectors Compared 1229697
	Sectors Differ 1
	Diffs range: 1
	Source (1229697) has 104832 fewer sectors than destination (1334529)
	Zero fill: 0
	Src Byte fill (F1): 0
	Dst Byte fill (B7): 104832
	Other fill: 0
	Other no fill: 0
	Hash after test: 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst
Actual Results:	FAT32 anomaly, Backfill anomaly
Analysis:	Expected results not achieved

Case DI-108 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk
	to an XBIOS-IDE destination disk
	and the source contains a FAT32 partition
	where the source disk is the same size as the destination
	Introduce a read error from the source.
Tester Name:	JRL
Test Date:	Mon Jul 08 09:24:49 2002
PC:	JudgeDee
Disks:	Source: DOS Drive 80 Physical Label A5
	Destination: DOS Drive 81 Physical Label A6
	Image media: DOS Drive 80 Physical Label A7
	A5 is a WDC WD200BB-00AUA1 with 39102336 sectors
	A6 is a WDC WD200BB-00AUA1 with 39102336 sectors
	A7 is a WDC WD200BB-00AUA1 with 39102336 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Fat32 only
	Disk: A5
	Host: JudgeDee
	Operator: JRL
	OS: NoOs
	Options: none
	Date: Mon Apr 15 14:35:04 2002
	cmd: Z:\ss\DISKWIPE.EXE A5 JudgeDee 80 A5 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\f32-src.txt
	No OS loaded, FAT32 partition only
	cmd: Z:\ss\DISKHASH.EXE A5 JudgeDee 80 /before /new_log
	Disk hash = 3DE5C01B5BB337EA3E6CF9BC25EB844F5D00FD14
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-108 JudgeDee 81 A6 /noask /dst /new_log /comment
	JRL
	X:\PM\PQMAGIC /cmd=X:\PM\D32X-ES.txt
	See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 80 27 9 5 2 10 >> A:\err-108.txt

Case DI-108 for SafeBack 2.18	

	`Z:\ss\baddisk 80 27 9 5 10 10 >> A:\err-108.txt`
	`Version 3.2 Created 06/05/02 at 13:50:39`
	`baddisk  compiled on 06/05/02 at 12:19:31`
	`return code 00010 on command 00002 from disk 00080`
	`at address 00027/00009/00005`
	`return code 00010 on command 00010 from disk 00080`
	`at address 00027/00009/00005`

Execute:	`z:\sb\master (backup to image)`
	`z:\sb\master (restore from image)`
	`Z:\ss\PARTCMP.EXE DI-108 JudgeDee 80 A5 81 A6 /new_log /comment JRL`
	`/select 1 1`
	`Z:\ss\DISKHASH.EXE DI-108 JudgeDee 80 /comment A5(JRL) /new_log /after`

Log files loc:	`test-archive/sb/sb-2.18/DI-108`

Log File
Highlights:
	`Source disk Drive 0x80, BIOS: Extensions Present`
	`Interrupt 13  bios  1023/254/63 (max cyl/hd values)`
	`Interrupt 13  ext   16383/016/63 (number of cyl/hd)`
	`39102336 total number of sectors reported via interrupt 13 from the BIOS`
	`N    Start LBA Length     Start C/H/S End C/H/S   boot Partition type`
	` 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 0B Fat32`
	` 2 X 001429785 037061955 0089/000/01 1023/254/63      0F extended`
	` 3 S 000000063 000208782 0089/001/01 0101/254/63      83 Linux`
	` 4 x 000208845 000144585 0102/000/01 0110/254/63      05 extended`
	` 5 S 000000063 000144522 0102/001/01 0110/254/63      0B Fat32`
	` 6 x 000771120 000192780 0137/000/01 0148/254/63      05 extended`
	` 7 S 000000063 000192717 0137/001/01 0148/254/63      16 other`
	` 8 S 000000000 000000000 0000/000/00 0000/000/00      00 empty entry`
	` 9 P 038491740 000064260 1023/000/01 1023/254/63      83 Linux`
	`10 P 038684520 000417690 1023/000/01 1023/254/63      82 Linux swap`
	`Destination disk Drive 0x81, BIOS: Extensions Present`
	`Interrupt 13  bios  1023/254/63 (max cyl/hd values)`
	`Interrupt 13  ext   16383/016/63 (number of cyl/hd)`
	`39102336 total number of sectors reported via interrupt 13 from the BIOS`
	`N    Start LBA Length     Start C/H/S End C/H/S   boot Partition type`
	` 1 P 000000063 001236942 0000/001/01 0076/254/63      0B Fat32`
	` 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`
	`Safeback log: DI-108/SB_108B.TXT`
	`        SafeBack 2.18 13Feb01 execution started on Jul  8, 2002 10:26.`
	`10:26:26  Menu selections:`
	`            Function:            Backup`
	`            Direct access:       No`
	`            Use XBIOS:           Auto`
	`            Adjust partitions:   Auto`
	`            Backfill on restore: Yes`
	`10:26:43  Backup file D:\IMG.001 created.`
	`          Backup file comment record:`
	`            DI-108`
	`10:26:47  Backing up drive C:`
	`          to D:\IMG.001 on Jul  8, 2002 10:26`
	`10:26:48  Local SafeBack is running on DOS 7.10`
	`          Source drive C:`
	`            Capacity........604 MB`
	`            Cylinders.......76`
	`            Heads..........255`
	`10:27:56  While reading drive C: a bad address mark error (status 02)`
	`occurred:`
	`          at relative sector 434263 (Cylinder 27, Head 8, Sector 5)`
	`10:29:46  Backup file CRC: 591da57a.`
	`10:29:46  Backup of drive C: completed on Jul  8, 2002 10:29.`
	`          SafeBack execution ended on Jul  8, 2002 10:30.`
	`Safeback log: DI-108/SB_108R.TXT`
	`        SafeBack 2.18 13Feb01 execution started on Jul  8, 2002 10:33.`
	`10:33:23  Menu selections:`
	`            Function:            Restore`
	`            Direct access:       No`
	`            Use XBIOS:           Auto`
	`            Adjust partitions:   Auto`
	`            Backfill on restore: Yes`

Case DI-108 for SafeBack 2.18	

	10:33:28 Backup file created on Jul 8, 2002 10:26
	                by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	                Backup file comment record:
	                  DI-108
	10:33:32 Backup file C:\IMG.001 opened for access.
	10:33:42 Partition/Boot information saved to A:\PT.SPS.
	10:33:43 Restore of drive C: from C:\IMG.001
	                to drive D: started on Jul 8, 2002 10:33
	10:33:43 Local SafeBack is running on DOS 7.10
	                Source drive C:
	                  Capacity........604 MB
	                  Cylinders.......76
	                  Heads..........255
	                Destination drive D:
	                  Capacity........604 MB
	                  Cylinders.......76
	                  Heads..........255
	10:34:41 The image for C: shows that a bad address mark error (status
	02) occurred
	                during backup at relative sector 434263 (Cylinder 27, Head 8,
	Sector 5)
	10:36:32 The whole-file CRC verifies: 591da57a
	10:36:57 Restore of drive C: to drive D: completed on Jul 8, 2002 10:36
	10:37:04 Menu selections:
	                Function: Restore
	                Direct access: No
	                Use XBIOS: Auto
	                Adjust partitions: Auto
	                Backfill on restore: Yes
	                SafeBack execution ended on Jul 8, 2002 10:37.
	= = = = Measurement Logs = = = =
	Sectors Compared 1236942
	Sectors Differ 2
	Diffs range: 1, 434263
	Hash after test: 3DE5C01B5BB337EA3E6CF9BC25EB844F5D00FD14

Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-109 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk to an XBIOS-IDE destination disk and the source contains a FAT16 partition where the source disk is the same size as the destination Introduce a write error to the destination.
Tester Name:	JRL
Test Date:	Sat Jun 22 09:54:39 2002
PC:	JudgeDee
Disks:	Source: DOS Drive 80 Physical Label F5 Destination: DOS Drive 81 Physical Label A6 Image media: DOS Drive 80 Physical Label 63 F5 is an IBM-DTLA-307020 with 40188960 sectors A6 is a WDC WD200BB-00AUA1 with 39102336 sectors 63 is a WDCWD64AA with 12594960 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: F5 Host: Cadfael Operator: JRL OS: WindowsMe/Linux Date: Sat Aug 11 11:13:43 2001 DISKWIPE.EXE F5_SRC Cadfael 80 F5 /src X:\pm\pqmagic /cmd=X:\pm\fat-src.txt

Case DI-109 for SafeBack 2.18	
	Load Operating System to Source disk DISKHASH.EXE F5_SRC Cadfael 80 /before Disk hash = 83A0002816BBF089F8BE33C41C92C3B5A0F42A54
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-109 JudgeDee 81 A6 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16X-ES.txt See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 81 33 2 10 3 10 >> A:\err-109.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00003 from disk 00081 at address 00033/00002/00010
Execute:	z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-109 JudgeDee 80 F5 81 A6 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-109 JudgeDee 80 /comment F5(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-109

Log File
Highlights:
	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 1023/254/63 (max cyl/hd values)
	Interrupt 13 ext 16383/016/63 (number of cyl/hd)
	40188960 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 06 Fat16
	 2 X 002249100 007181055 0140/000/01 0586/254/63 05 extended
	 3 S 000000063 000208782 0140/001/01 0152/254/63 83 Linux
	 4 x 000208845 000144585 0153/000/01 0161/254/63 05 extended
	 5 S 000000063 000144522 0153/001/01 0161/254/63 06 Fat16
	 6 x 004450005 000192780 0417/000/01 0428/254/63 05 extended
	 7 S 000000063 000192717 0417/001/01 0428/254/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 009430155 006152895 0587/000/01 0969/254/63 83 Linux
	10 P 039760875 000417690 1023/000/01 1023/254/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1023/254/63 (max cyl/hd values)
	Interrupt 13 ext 16383/016/63 (number of cyl/hd)
	39102336 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 06 Fat16
	 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
	Safeback log: DI-109/SB_109B.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 22, 2002 10:51.
	10:51:32 Menu selections:
	             Function: Backup
	             Direct access: No
	             Use XBIOS: Auto
	             Adjust partitions: Auto
	             Backfill on restore: Yes
	10:51:58 Backup file C:\IMG.001 created.
	          Backup file comment record:
	             DI-109
	10:52:05 Backing up drive D:
	          to C:\IMG.001 on Jun 22, 2002 10:52
	10:52:06 Local SafeBack is running on DOS 7.10
	          Source drive D:
	            Capacity........604 MB
	            Cylinders.......76
	            Heads...........255
	10:55:37 Backup file CRC: 5f9fda26.
	10:55:37 Backup of drive D: completed on Jun 22, 2002 10:55.
	          SafeBack execution ended on Jun 22, 2002 10:56.
	Safeback log: DI-109/SB_109R.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 22, 2002 11:00.
	11:00:35 Menu selections:
	             Function: Restore
	             Direct access: No

Case DI-109 for SafeBack 2.18	
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	11:00:41 Backup file created on Jun 22, 2002 10:52
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-109
	11:00:44 Backup file C:\IMG.001 opened for access.
	11:00:56 Partition/Boot information saved to A:\PT.SPS.
	11:00:57 Restore of drive D: from C:\IMG.001
	to drive D: started on Jun 22, 2002 11:00
	11:00:57 Local SafeBack is running on DOS 7.10
	Source drive D:
	Capacity........604 MB
	Cylinders.......76
	Heads...........255
	Destination drive D:
	Capacity........604 MB
	Cylinders.......76
	Heads...........255
	11:02:23 While writing drive D:, a bad address mark error (status 02) occurred
	at relative sector 530217 (Cylinder 33, Head 1, Sector 10)
	11:04:01 The whole-file CRC verifies: 5f9fda26
	11:04:01 Restore of drive D: to drive D: completed on Jun 22, 2002 11:04
	11:04:07 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	SafeBack execution ended on Jun 22, 2002 11:04.
	= = = = Measurement Logs = = = =
	Sectors Compared 1236942
	Sectors Differ 11
	Diffs range: 530217, 530235-530240, 530245-530247,
	Hash after test: 83A0002816BBF089F8BE33C41C92C3B5A0F42A54
Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-118 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk to an XBIOS-IDE destination disk and the source contains a FAT32 partition where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Fri Dec 14 10:11:43 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label F1 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label CC F1 is a Quantum Sirooco1700A with 3335472 sectors B7 is a WDC AC21600H with 3173184 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32 Disk: F1 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Fri Nov 16 10:42:33 2001

Case DI-118 for SafeBack 2.18	
	cmd: Z:\ss\DISKWIPE.EXE F1 JudgeDee 80 F1 /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE F1 JudgeDee 80 /before /new_log Disk hash = 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-118 Rumpole 81 B7 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32X-BS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001128897 0000/001/01 0279/063/63 0B Fat32
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-118 Rumpole 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-118 Rumpole 81 /all /new_log /comment JRL(B7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-118 Rumpole 80 F1 81 B7 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-118 Rumpole 80 /comment JRL(F1) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-118

Log File
Highlights:
	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 0826/063/63 (max cyl/hd values)
	Interrupt 13 ext 03309/016/63 (number of cyl/hd)
	3335472 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 0B Fat32
	 2 X 001431360 001290240 0355/000/01 0674/063/63 05 extended
	 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	 5 S 000000063 000145089 0406/001/01 0441/063/63 0B Fat32
	 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 002721600 000064512 0675/000/01 0690/063/63 83 Linux
	10 P 002923200 000411264 0725/000/01 0826/063/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 0786/063/63 (max cyl/hd values)
	Interrupt 13 ext 03148/016/63 (number of cyl/hd)
	3173184 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001128897 0000/001/01 0279/063/63 0B Fat32
	 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
	Safeback log: DI-118/SB_118B.TXT
	       SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 10:36.
	       The tape drive was not used.
	10:37:09 Menu selections:
	       Function: Backup
	       Direct access: No
	       Use XBIOS: Yes
	       Adjust partitions: No
	       Backfill on restore: No
	10:37:46 Backup file E:\IMG.001 created.
	       Backup file comment record:
	       DI-118
	10:37:58 Backing up drive C:
	       to E:\IMG.001 on Dec 14, 2001 10:37
	10:37:59 Local SafeBack is running on DOS 7.10
	       Source drive C:
	       Capacity........600 MB
	       Cylinders.......304
	       Heads...........64
	10:40:16 Backup file CRC: 0aa597a1.
	10:40:16 Backup of drive C: completed on Dec 14, 2001 10:40.
	       SafeBack execution ended on Dec 14, 2001 10:43.
	Safeback log: DI-118/SB_118R.TXT
	       SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 10:47.
	       The tape drive was not used.
	10:47:18 Menu selections:

Case DI-118 for SafeBack 2.18	

	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	10:47:33 Backup file created on Dec 14, 2001 10:37
	         by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	         Backup file comment record:
	           DI-118
	10:47:35 Backup file E:\IMG.001 opened for access.
	10:47:41 The destination drive capacity is smaller than that of the
	         original source drive.
	10:47:47 Partition/Boot information saved to A:\PT.SPS.
	10:47:48 Restore of drive C: from E:\IMG.001
	         to drive D: started on Dec 14, 2001 10:47
	10:47:48 Partition fixup has been disabled.
	10:47:48 Local SafeBack is running on DOS 7.10
	         Source drive C:
	           Capacity........600 MB
	           Cylinders.......304
	           Heads...........64
	          Destination drive D:
	           Capacity........551 MB
	           Cylinders.......279
	           Heads...........64
	10:50:39 Restore of drive C: to drive D: completed on Dec 14, 2001 10:50
	10:50:45 Menu selections:
	         Function: Restore
	          Direct access: No
	          Use XBIOS: Yes
	          Adjust partitions: No
	          Backfill on restore: No
	         SafeBack execution ended on Dec 14, 2001 10:50.
	= = = = Measurement Logs = = = =
	Sectors Compared 1128897
	Sectors Differ 1
	Diffs range: 1
	Source (1229697) has 100800 more sectors than destination (1128897)
	Hash after test: 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A

Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-119 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk to an XBIOS-IDE destination disk and the source contains a FAT16 partition where the source disk is larger than the destination Create the image on a removable medium.
Tester Name:	JRL
Test Date:	Mon Dec 10 09:12:27 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label CC B8 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me

Case DI-119 for SafeBack 2.18	
	Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-119 Rumpole 81 B7 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16X-BS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001128897 0000/001/01 0279/063/63 06 Fat16
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-119 Rumpole 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-119 Rumpole 81 /all /new_log /comment JRL(B7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-119 Rumpole 80 B8 81 B7 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-119 Rumpole 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-119

Log File
Highlights:
	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 0786/063/63 (max cyl/hd values)
	Interrupt 13 ext 03148/016/63 (number of cyl/hd)
	3173184 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001229697 0000/001/01 0304/063/63 Boot 06 Fat16
	 2 X 001431360 001128960 0355/000/01 0634/063/63 05 extended
	 3 S 000000063 000205569 0355/001/01 0405/063/63 83 Linux
	 4 x 000205632 000145152 0406/000/01 0441/063/63 05 extended
	 5 S 000000063 000145089 0406/001/01 0441/063/63 06 Fat16
	 6 x 000762048 000185472 0544/000/01 0589/063/63 05 extended
	 7 S 000000063 000185409 0544/001/01 0589/063/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 002560320 000064512 0635/000/01 0650/063/63 83 Linux
	10 P 002761920 000411264 0685/000/01 0786/063/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 0786/063/63 (max cyl/hd values)
	Interrupt 13 ext 03148/016/63 (number of cyl/hd)
	3173184 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001128897 0000/001/01 0279/063/63 06 Fat16
	 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
	Safeback log: DI-119/SB_119B.TXT
	       SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 09:27.
	       The tape drive was not used.
	09:27:13 Menu selections:
	       Function: Backup
	       Direct access: No
	       Use XBIOS: Yes
	       Adjust partitions: No
	       Backfill on restore: No
	09:27:47 Backup file X:\IMG.001 created.
	       Backup file comment record:
	       DI-119
	09:28:05 Backing up drive C:
	       to X:\IMG.001 on Dec 10, 2001 09:28
	09:28:07 Local SafeBack is running on DOS 7.10
	       Source drive C:
	       Capacity........600 MB
	       Cylinders.......304
	       Heads...........64
	09:38:38 Backup file CRC: 2d38c1fc.
	09:38:38 Backup of drive C: completed on Dec 10, 2001 09:38.
	       SafeBack execution ended on Dec 10, 2001 09:39.
	Safeback log: DI-119/SB_119R.TXT

Case DI-119 for SafeBack 2.18	
	SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 09:40.
	The tape drive was not used.
	09:40:31 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	09:40:40 Backup file volume 1 requested.
	09:40:49 Backup file created on Dec 10, 2001 09:28
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-119
	09:40:52 Backup file X:\IMG.001 opened for access.
	09:41:02 The destination drive capacity is smaller than that of the
	original source drive.
	09:41:11 Partition/Boot information saved to A:\PT.SPS.
	09:41:11 Restore of drive C: from X:\IMG.001
	to drive D: started on Dec 10, 2001 09:41
	09:41:11 Partition fixup has been disabled.
	09:41:11 Local SafeBack is running on DOS 7.10
	Source drive C:
	Capacity........600 MB
	Cylinders.......304
	Heads...........64
	Destination drive D:
	Capacity........551 MB
	Cylinders.......279
	Heads...........64
	09:48:50 Restore of drive C: to drive D: completed on Dec 10, 2001 09:48
	= = = = Measurement Logs = = = =
	Sectors Compared 1128897
	Sectors Differ 0
	Diffs range:
	Source (1229697) has 100800 more sectors than destination (1128897)
	Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst, src is truncated on dst
	truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-120 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk
	to an XBIOS-SCSI destination disk
	where the source disk is smaller than the destination
	Introduce an error on the image.
Tester Name:	JRL
Test Date:	Thu Nov 15 12:49:10 2001
PC:	Wimsey
Disks:	Source: DOS Drive 81 Physical Label E4
	Destination: DOS Drive 82 Physical Label E7
	Image media: DOS Drive 80 Physical Label A7
	E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors
	E7 is a SEAGATE ST318404LC with 35843670 sectors
	A7 is a WDC WD200BB-00AUA1 with 39102336 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32
	Disk: E4
	Host: JudgeDee
	Operator: JRL
	OS: Windows 2000/NT
	Date: Sat Jul 21 16:58:28 2001
	DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000
	source disk

Case DI-120 for SafeBack 2.18	
	X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-120 Wimsey 81 E7 /noask /dst /new_log /comment JRL
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-120 Host E:\IMG.001 6103 AE /comment None Change byte 6103 of file E:\IMG.001 from 0xFFE4 to 0xFFAE
Execute:	z:\ss\PARTAB.EXE DI-120 Wimsey 81 /all /new_log /comment JRL(E7) Z:\ss\PARTAB.EXE DI-120 Wimsey 82 /all /new_log /comment JRL(E7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-120 Wimsey 81 E4 82 E7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-120 Wimsey 81 /comment JRL(E4) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-120

Log File Highlights:	Safeback log: DI-120/SB_120B.TXT
	       SafeBack 2.18 13Feb01 execution started on Nov 15, 2001 13:07.
	13:07:43 Menu selections:
	      Function: Backup
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	13:08:05 Backup file E:\IMG.001 created.
	      Backup file comment record:
	       DI-120
	13:08:58 Backing up drive 1:
	      to E:\IMG.001 on Nov 15, 2001 13:08
	13:08:59 Local SafeBack is running on DOS 7.10
	      Source drive 1:
	       Capacity........8759 MB
	       Cylinders.......1116
	       Heads..........255
	13:08:59 Partition table for drive 1:
	13:15:23 Backup file E:\IMG.002 created.
	13:21:41 Backup file E:\IMG.003 created.
	13:28:06 Backup file E:\IMG.004 created.
	13:34:34 Backup file E:\IMG.005 created.
	13:36:19 Backup file CRC: e5e77797.
	13:36:19 Backup of drive 1: completed on Nov 15, 2001 13:36.
	      SafeBack execution ended on Nov 15, 2001 14:14.
	Safeback log: DI-120/SB_120R.TXT
	      SafeBack 2.18 13Feb01 execution started on Nov 15, 2001 14:18.
	14:18:20 Menu selections:
	      Function: Restore
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	14:18:33 Backup file created on Nov 15, 2001 13:08
	      by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	      Backup file comment record:
	       DI-120
	14:18:36 Backup file E:\IMG.001 opened for access.
	14:18:53 Restore of drive 1: from E:\IMG.001
	      to drive 2: started on Nov 15, 2001 14:18
	14:18:53 Partition fixup has been disabled.
	14:18:53 Local SafeBack is running on DOS 7.10
	      Source drive 1:
	       Capacity........8759 MB
	       Cylinders.......1116
	       Heads..........255
	      Destination drive 2:
	       Capacity........17502 MB
	       Cylinders.......2231
	       Heads..........255
	14:18:53 IMG.001, record 0 has a CRC error. 1dc8 was expected, but e753

Case DI-120 for SafeBack 2.18

	read.
	14:19:01 Backup file CRC error ignored by recovery at sector 0.
	14:19:06 Data starting at sector 0 and the next 119 sectors is
	questionable due to CRC errors.
	14:25:50 Backup file E:\IMG.002 opened for access.
	14:32:35 Backup file E:\IMG.003 opened for access.
	14:39:29 Backup file E:\IMG.004 opened for access.
	14:46:25 Backup file E:\IMG.005 opened for access.
	14:48:18 CRC mismatch: Calculated: 1b535c9a, Read: e5e77797
	15:11:09 Restore of drive 1: to drive 2: completed on Nov 15, 2001 15:11
	15:18:51 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Nov 15, 2001 15:18.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 1
	Diffs range 11
	Source (17938985) has 17904685 fewer sectors than destination (35843670)
	Zero fill: 17904685
	Src Byte fill (E4): 0
	Dst Byte fill (E7): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Expected Results:	Source disk is unchanged image verification error
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-121 for SafeBack 2.18

Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Thu Nov 08 14:24:10 2001
PC:	Cadfael
Disks:	Source: DOS Drive 81 Physical Label E3 Destination: DOS Drive 82 Physical Label E6 Image media: DOS Drive 80 Physical Label A7 E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E6 is a SEAGATE ST318404LC with 35843670 sectors A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-121 Wimsey 81 E6 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-121 Cadfael 81 /all /new_log /comment JRL(E6) Z:\ss\PARTAB.EXE DI-121 Cadfael 82 /all /new_log /comment JRL(E6) z:\sb\master (backup to image) z:\sb\master (restore from image)

Case DI-121 for SafeBack 2.18	
	Z:\ss\DISKCMP.EXE DI-121 Cadfael 81 E3 82 E6 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-121 Cadfael 81 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-121

Log File
Highlights:
	Safeback log: DI-121/SB_121B.TXT
	      SafeBack 2.18 13Feb01 execution started on Nov 8, 2001 14:25.
	14:26:30 Menu selections:
	     Function: Backup
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	14:27:16 Backup file E:\IMG.001 created.
	      Backup file comment record:
	       DI-121
	14:27:22 Backing up drive 1:
	      to E:\IMG.001 on Nov 8, 2001 14:27
	14:27:24 Local SafeBack is running on DOS 7.10
	      Source drive 1:
	       Capacity........8759 MB
	       Cylinders.......1116
	       Heads...........255
	14:27:24 Partition table for drive 1:
	14:33:34 Backup file E:\IMG.002 created.
	14:39:43 Backup file E:\IMG.003 created.
	14:45:54 Backup file E:\IMG.004 created.
	14:52:11 Backup file E:\IMG.005 created.
	14:53:59 Backup file CRC: d3887c3f.
	14:53:59 Backup of drive 1: completed on Nov 8, 2001 14:53.
	      SafeBack execution ended on Nov 8, 2001 14:57.
	Safeback log: DI-121/SB_121R.TXT
	      SafeBack 2.18 13Feb01 execution started on Nov 8, 2001 14:59.
	14:59:19 Menu selections:
	     Function: Restore
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	15:00:15 Backup file created on Nov 8, 2001 14:27
	      by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	      Backup file comment record:
	       DI-121
	15:00:16 Backup file E:\IMG.001 opened for access.
	15:00:58 Restore of drive 1: from E:\IMG.001
	      to drive 2: started on Nov 8, 2001 15:00
	15:00:58 Partition fixup has been disabled.
	15:00:58 Local SafeBack is running on DOS 7.10
	      Source drive 1:
	       Capacity........8759 MB
	       Cylinders.......1116
	       Heads...........255
	      Destination drive 2:
	       Capacity........17502 MB
	       Cylinders.......2231
	       Heads...........255
	15:07:33 Backup file E:\IMG.002 opened for access.
	15:14:11 Backup file E:\IMG.003 opened for access.
	15:20:52 Backup file E:\IMG.004 opened for access.
	15:27:35 Backup file E:\IMG.005 opened for access.
	15:29:31 The whole-file CRC verifies: d3887c3f
	15:34:54 Restore of drive 1: to drive 2: completed on Nov 8, 2001 15:34
	15:36:31 Menu selections:
	     Function: Restore
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	      SafeBack execution ended on Nov 8, 2001 15:36.
	= = = = Measurement Logs = = = =

Case DI-121 for SafeBack 2.18	
	Sectors Compared 17938985
	Sectors Differ 0
	Diffs range
	Source (17938985) has 17904685 fewer sectors than destination (35843670)
	Zero fill: 17904685
	Src Byte fill (E3): 0
	Dst Byte fill (E6): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-122 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk
	to an XBIOS-SCSI destination disk
	where the source disk is the same size as the destination
	Introduce a read error from the source.
Tester Name:	JRL
Test Date:	Tue Apr 16 08:03:28 2002
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label E4
	Destination: DOS Drive 81 Physical Label E1
	Image media: DOS Drive 82 Physical Label CC
	E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors
	E1 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors
	CC is a SEAGATE ST336705LC with 71687370 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32
	Disk: E4
	Host: JudgeDee
	Operator: JRL
	OS: Windows 2000/NT
	Date: Sat Jul 21 16:58:28 2001
	DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000
	source disk
	X:\pm\pqmagic /cmd=X:\pm\nt-src.txt
	Load Operating System to Source disk
	cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before
	Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-122 Rumpole 81 E1 /noask /dst /new_log /comment JRL
Error Setup:	Z:\ss\badx13 80 42 10 1380770 > a:\err-122.txt
	Version 3.1 Created 10/11/01 at 12:41:45
	badx13 compiled on 10/11/01 at 12:43:21
	Return error code 10 for X13 command 42 from drive 80 at LBA sector
	1,380,770
Execute:	Z:\ss\PARTAB.EXE DI-122 Rumpole 80 /all /new_log /comment JRL(E1)
	Z:\ss\PARTAB.EXE DI-122 Rumpole 81 /all /new_log /comment JRL(E1)
	z:\sb\master (backup to image)
	z:\sb\master (restore from image)
	Z:\ss\DISKCMP.EXE DI-122 Rumpole 80 E4 81 E1 /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-122 Rumpole 80 /comment JRL(E4) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-122
Log File Highlights:	Safeback log: DI-122/SB_122B.TXT
	SafeBack 2.18 13Feb01 execution started on Apr 16, 2002 08:13.
	The tape drive was not used.
	08:13:12 Menu selections:
	Function: Backup
	Direct access: No
	Use XBIOS: Auto

```
Case DI-122 for SafeBack 2.18
                       Adjust partitions:      Auto
                       Backfill on restore:    Yes
            08:13:27  Backup file E:\IMG.001 created.
                       Backup file comment record:
                         DI-122
            08:13:33  Backing up drive 0:
                       to E:\IMG.001 on Apr 16, 2002 08:13
            08:13:34  Local SafeBack is running on DOS 7.10
                       Source drive 0:
                         Capacity........8759 MB
                         Cylinders.......1116
                         Heads...........255
            08:13:34  Partition table for drive 0:
            08:14:41  While reading drive 0: a sector flagged bad error (status 0a)
            occurred:
                       at relative sector 1380770 (Cylinder 85, Head 241, Sector 63)
            08:17:01  Backup file E:\IMG.002 created.
            08:20:39  Backup file E:\IMG.003 created.
            08:24:26  Backup file E:\IMG.004 created.
            08:28:12  Backup file E:\IMG.005 created.
            08:29:09  Backup file CRC: aec0b453.
            08:29:12  Backup of drive 0: completed on Apr 16, 2002 08:29.
                       SafeBack execution ended on Apr 16, 2002 08:31.
            Safeback log: DI-122/SB_122R.TXT
                       SafeBack 2.18 13Feb01 execution started on Apr 16, 2002 08:37.
                       The tape drive was not used.
            08:37:20  Menu selections:
                         Function:              Restore
                         Direct access:         No
                         Use XBIOS:             Auto
                         Adjust partitions:     Auto
                         Backfill on restore:   Yes
            08:37:42  Backup file created on Apr 16, 2002 08:13
                       by Gary Fisher Natl Institute of Standards & Technology
            Software Diagnostics & Con
                       Backup file comment record:
                         DI-122
            08:37:44  Backup file D:\IMG.001 opened for access.
            08:37:54  Restore of drive 0: from D:\IMG.001
                       to drive 1: started on Apr 16, 2002 08:37
            08:37:54  Local SafeBack is running on DOS 7.10
                       Source drive 0:
                         Capacity........8759 MB
                         Cylinders.......1116
                         Heads...........255
                       Destination drive 1:
                         Capacity........8759 MB
                         Cylinders.......1116
                         Heads...........255
            08:38:51  The image for 0: shows that a sector flagged bad error (status
            0a) occurred
                       during backup at relative sector 1380770 (Cylinder 85, Head
            241, Sector 63)
            08:40:52  Backup file D:\IMG.002 opened for access.
            08:43:48  Backup file D:\IMG.003 opened for access.
            08:46:45  Backup file D:\IMG.004 opened for access.
            08:49:42  Backup file D:\IMG.005 opened for access.
            08:50:31  The whole-file CRC verifies:  aec0b453
            08:51:27  Partition table for drive 1:
            08:51:27  Restore of drive 0: to drive 1: completed on Apr 16, 2002 08:51
            08:51:31  Menu selections:
                         Function:              Restore
                         Direct access:         No
                         Use XBIOS:             Auto
                         Adjust partitions:     Auto
                         Backfill on restore:   Yes
                       SafeBack execution ended on Apr 16, 2002 08:51.
            = = = = Measurement Logs = = = =
            Sectors Compared 17938985
            Sectors Differ 1
```

Case DI-122 for SafeBack 2.18	
	Diffs range 1380770 Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-123 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk where the source disk is the same size as the destination Introduce a write error to the destination.
Tester Name:	JRL
Test Date:	Mon Apr 15 09:35:08 2002
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label E4 Destination: DOS Drive 81 Physical Label E1 Image media: DOS Drive 82 Physical Label CC E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E1 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32 Disk: E4 Host: JudgeDee Operator: JRL OS: Windows 2000/NT Date: Sat Jul 21 16:58:28 2001 DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000 source disk X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-123 Cadfael 81 E1 /noask /dst /new_log /comment JRL
Error Setup:	Z:\ss\badx13 81 43 10 17938800 > a:\err-123.txt Version 3.1 Created 10/11/01 at 12:41:45 badx13 compiled on 10/11/01 at 12:43:21 Return error code 10 for X13 command 43 from drive 81 at LBA sector 17,938,800
Execute:	Z:\ss\PARTAB.EXE DI-123 Cadfael 80 /all /new_log /comment JRL(E1) Z:\ss\PARTAB.EXE DI-123 Cadfael 81 /all /new_log /comment JRL(E1) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-123 Cadfael 80 E4 81 E1 /new_log /comment JRL z:\ss\DISKHASH.EXE DI-123 Cadfael 80 /comment JRL(E4) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-123

Log File
Highlights:
	Safeback log: DI-123/SB_123B.TXT
	        SafeBack 2.18 13Feb01 execution started on Apr 15, 2002 10:00.
	10:00:51 Menu selections:
	            Function: Backup
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	10:01:10 Backup file E:\IMG.001 created.
	          Backup file comment record:
	            DI-123
	10:01:20 Backing up drive 0:
	          to E:\IMG.001 on Apr 15, 2002 10:01
	10:01:22 Local SafeBack is running on DOS 7.10

Case DI-123 for SafeBack 2.18	
	Source drive 0: Capacity........8759 MB Cylinders.......1116 Heads..........255 10:01:22 Partition table for drive 0: 10:04:59 Backup file E:\IMG.002 created. 10:08:28 Backup file E:\IMG.003 created. 10:11:57 Backup file E:\IMG.004 created. 10:15:14 Backup file E:\IMG.005 created. 10:16:06 Backup file CRC: 471e534b. 10:16:06 Backup of drive 0: completed on Apr 15, 2002 10:16. SafeBack execution ended on Apr 15, 2002 10:20. Safeback log: DI-123/SB_123R.TXT SafeBack 2.18 13Feb01 execution started on Apr 15, 2002 10:24. 10:24:48 Menu selections: Function: Restore Direct access: No Use XBIOS: Auto Adjust partitions: Auto Backfill on restore: Yes 10:25:15 Backup file created on Apr 15, 2002 10:01 by Gary Fisher Natl Institute of Standards & Technology Software Diagnostics & Con Backup file comment record: DI-123 10:25:17 Backup file D:\IMG.001 opened for access. 10:25:31 Restore of drive 0: from D:\IMG.001 to drive 1: started on Apr 15, 2002 10:25 10:25:31 Local SafeBack is running on DOS 7.10 Source drive 0: Capacity........8759 MB Cylinders.......1116 Heads..........255 Destination drive 1: Capacity.......8759 MB Cylinders.......1116 Heads..........255 10:28:27 Backup file D:\IMG.002 opened for access. 10:31:21 Backup file D:\IMG.003 opened for access. 10:34:15 Backup file D:\IMG.004 opened for access. 10:37:09 Backup file D:\IMG.005 opened for access. 10:37:53 While writing drive 1:, a sector flagged bad error (status 0a) occurred at relative sector 17938800 (Cylinder 1116, Head 162, Sector 55) 10:37:53 The whole-file CRC verifies: 471e534b 10:52:38 Partition table for drive 1: 10:52:38 Restore of drive 0: to drive 1: completed on Apr 15, 2002 10:52 10:53:09 Menu selections: Function: Restore Direct access: No Use XBIOS: Auto Adjust partitions: Auto Backfill on restore: Yes SafeBack execution ended on Apr 15, 2002 10:53. = = = = Measurement Logs = = = = Sectors Compared 17938985 Sectors Differ 93 Diffs range 17938800-17938892 Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-126 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk

Case DI-126 for SafeBack 2.18	
	to an XBIOS-SCSI destination disk
	where the source disk is the same size as the destination
	Introduce an error on the image.
Tester Name:	JRL
Test Date:	Thu Nov 15 12:51:47 2001
PC:	Cadfael
Disks:	Source: DOS Drive 81 Physical Label E3
	Destination: DOS Drive 82 Physical Label E2
	Image media: DOS Drive 80 Physical Label A8
	E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors
	E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors
	A8 is a WDC WD200BB-00AUA1 with 39102336 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16
	Disk: E3
	Host: Cadfael
	Operator: JRL
	OS: Linux Red Hat 7.1/Windows Me
	Date: Sat Jul 21 16:17:29 2001
	DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\fat-src.txt
	Load Operating System to Source disk
	DISKHASH.EXE E3_SRC Rumpole 80 /before
	Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-126 Cadfael 81 E2 /noask /dst /new_log /comment JRL
Error Setup:	cmd: z:\ss\CORRUPT.EXE di-126 Host E:\img.001 8044 AE /comment None
	Change byte 8044 of file E:\img.001 from 0xFFE3 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-126 Cadfael 81 /all /new_log /comment JRL(E2)
	Z:\ss\PARTAB.EXE DI-126 Cadfael 82 /all /new_log /comment JRL(E2)
	z:\sb\master (backup to image)
	z:\sb\master (restore from image)
	Z:\ss\DISKCMP.EXE DI-126 Cadfael 81 E3 82 E2 /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-126 Cadfael 81 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-126
Log File Highlights:	Safeback log: DI-126/SB_126B.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 15, 2001 13:00.
	13:00:50 Menu selections:
	Function: Backup
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	13:01:38 Backup file E:\IMG.001 created.
	Backup file comment record:
	DI-126
	13:01:46 Backing up drive 1:
	to E:\IMG.001 on Nov 15, 2001 13:01
	13:01:47 Local SafeBack is running on DOS 7.10
	Source drive 1:
	Capacity........8759 MB
	Cylinders.......1116
	Heads...........255
	13:01:47 Partition table for drive 1:
	13:08:15 Backup file E:\IMG.002 created.
	13:14:35 Backup file E:\IMG.003 created.
	13:21:00 Backup file E:\IMG.004 created.
	13:27:34 Backup file E:\IMG.005 created.
	13:29:19 Backup file CRC: 58a8f1e3.
	13:29:20 Backup of drive 1: completed on Nov 15, 2001 13:29.
	SafeBack execution ended on Nov 15, 2001 14:10.
	Safeback log: DI-126/SB_126R.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 15, 2001 14:17.
	14:17:22 Menu selections:
	Function: Restore

Case DI-126 for SafeBack 2.18	

	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	14:17:33 Backup file created on Nov 15, 2001 13:01
	         by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	         Backup file comment record:
	           DI-126
	14:17:36 Backup file E:\IMG.001 opened for access.
	14:17:58 Restore of drive 1: from E:\IMG.001
	         to drive 2: started on Nov 15, 2001 14:17
	14:17:58 Partition fixup has been disabled.
	14:17:58 Local SafeBack is running on DOS 7.10
	         Source drive 1:
	           Capacity........8759 MB
	           Cylinders.......1116
	           Heads...........255
	          Destination drive 2:
	           Capacity.......8759 MB
	           Cylinders.......1116
	           Heads...........255
	14:17:58 IMG.001, record 0 has a CRC error. d3b2 was expected, but f4c3
	read.
	14:18:05 Backup file CRC error ignored by recovery at sector 0.
	14:18:17 Data starting at sector 0 and the next 119 sectors is
	         questionable due to CRC errors.
	14:25:07 Backup file E:\IMG.002 opened for access.
	14:31:56 Backup file E:\IMG.003 opened for access.
	14:38:50 Backup file E:\IMG.004 opened for access.
	14:45:52 Backup file E:\IMG.005 opened for access.
	14:47:50 CRC mismatch: Calculated: 1e24a621, Read: 58a8f1e3
	15:10:00 Restore of drive 1: to drive 2: completed on Nov 15, 2001 15:10
	15:10:06 Menu selections:
	         Function: Restore
	         Direct access: No
	         Use XBIOS: Yes
	         Adjust partitions: No
	         Backfill on restore: No
	         SafeBack execution ended on Nov 15, 2001 15:10.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 1
	Diffs range 15
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0

Expected Results:	Source disk is unchanged image verification error
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-127 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk where the source disk is the same size as the destination
Tester Name:	JRL
Test Date:	Tue Nov 13 16:34:19 2001
PC:	Cadfael
Disks:	Source: DOS Drive 81 Physical Label E3 Destination: DOS Drive 82 Physical Label E2 Image media: DOS Drive 80 Physical Label A8 E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors A8 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael

Case DI-127 for SafeBack 2.18	
	Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-127 Cadfael 81 E2 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-127 Cadfael 81 /all /new_log /comment JRL(E2) Z:\ss\PARTAB.EXE DI-127 Cadfael 82 /all /new_log /comment JRL(E2) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-127 Cadfael 81 E3 82 E2 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-127 Cadfael 81 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-127

Log File
Highlights:
	Safeback log: DI-127/SB_127B.TXT
	     SafeBack 2.18 13Feb01 execution started on Nov 13, 2001 18:04.
	18:04:21 Menu selections:
	     Function: Backup
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	18:04:49 Backup file E:\IMG.001 created.
	     Backup file comment record:
	      DI-127
	18:04:56 Backing up drive 1:
	     to E:\IMG.001 on Nov 13, 2001 18:04
	18:04:58 Local SafeBack is running on DOS 7.10
	     Source drive 1:
	      Capacity........8759 MB
	      Cylinders.......1116
	      Heads...........255
	18:04:58 Partition table for drive 1:
	18:11:06 Backup file E:\IMG.002 created.
	18:17:17 Backup file E:\IMG.003 created.
	18:23:29 Backup file E:\IMG.004 created.
	18:29:46 Backup file E:\IMG.005 created.
	18:31:35 Backup file CRC: 6fa0ad4f.
	18:31:35 Backup of drive 1: completed on Nov 13, 2001 18:31.
	     SafeBack execution ended on Nov 13, 2001 18:48.
	Safeback log: DI-127/SB_127R.TXT
	     SafeBack 2.18 13Feb01 execution started on Nov 13, 2001 18:49.
	18:49:41 Menu selections:
	     Function: Restore
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	18:50:11 Backup file created on Nov 13, 2001 18:04
	     by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	     Backup file comment record:
	      DI-127
	18:50:15 Backup file E:\IMG.001 opened for access.
	18:50:36 Restore of drive 1: from E:\IMG.001
	     to drive 2: started on Nov 13, 2001 18:50
	18:50:36 Partition fixup has been disabled.
	18:50:36 Local SafeBack is running on DOS 7.10
	     Source drive 1:
	      Capacity........8759 MB
	      Cylinders.......1116
	      Heads...........255
	     Destination drive 2:

Case DI-127 for SafeBack 2.18	
	Capacity........8759 MB
	Cylinders.......1116
	Heads...........255
	18:57:35 Backup file E:\IMG.002 opened for access.
	19:04:37 Backup file E:\IMG.003 opened for access.
	19:11:42 Backup file E:\IMG.004 opened for access.
	19:18:49 Backup file E:\IMG.005 opened for access.
	19:20:51 The whole-file CRC verifies: 6fa0ad4f
	19:20:51 Restore of drive 1: to drive 2: completed on Nov 13, 2001 19:20
	10:41:17 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Nov 14, 2001 10:41.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 0
	Diffs range
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged src compares equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-128 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Tue Nov 13 16:17:49 2001
PC:	Wimsey
Disks:	Source: DOS Drive 81 Physical Label E4 Destination: DOS Drive 82 Physical Label EB Image media: DOS Drive 80 Physical Label A7 E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors EB is a SEAGATE ST39204LC with 17921835 sectors A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32 Disk: E4 Host: JudgeDee Operator: JRL OS: Windows 2000/NT Date: Sat Jul 21 16:58:28 2001 DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000 source disk X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-128 Wimsey 81 EB /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-128 Wimsey 81 /all /new_log /comment JRL(EB) Z:\ss\PARTAB.EXE DI-128 Wimsey 82 /all /new_log /comment JRL(EB) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-128 Wimsey 81 E4 82 EB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-128 Wimsey 81 /comment JRL(E4) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-128
Log File	Safeback log: DI-128/SB_128B.TXT

```
Case DI-128 for SafeBack 2.18
Highlights:              SafeBack 2.18 13Feb01 execution started on Nov 13, 2001 16:25.
              16:25:48  Menu selections:
                            Function:          Backup
                            Direct access:     No
                            Use XBIOS:         Yes
                            Adjust partitions: No
                            Backfill on restore:  No
              16:26:24  Backup file E:\IMG.001 created.
                        Backup file comment record:
                            DI-128
              16:26:31  Backing up drive 1:
                            to E:\IMG.001 on Nov 13, 2001 16:26
              16:26:32  Local SafeBack is running on DOS 7.10
                        Source drive 1:
                            Capacity........8759 MB
                            Cylinders.......1116
                            Heads...........255
              16:26:32  Partition table for drive 1:
              16:32:50  Backup file E:\IMG.002 created.
              16:39:09  Backup file E:\IMG.003 created.
              16:45:29  Backup file E:\IMG.004 created.
              16:51:46  Backup file E:\IMG.005 created.
              16:53:35  Backup file CRC: 119fa3ac.
              16:53:36  Backup of drive 1: completed on Nov 13, 2001 16:53.
                        SafeBack execution ended on Nov 13, 2001 16:54.
              Safeback log: DI-128/SB_128R.TXT
                        SafeBack 2.18 13Feb01 execution started on Nov 13, 2001 16:55.
              16:55:49  Menu selections:
                            Function:          Restore
                            Direct access:     No
                            Use XBIOS:         Yes
                            Adjust partitions: No
                            Backfill on restore:  No
              16:56:04  Backup file created on Nov 13, 2001 16:26
                         by Gary Fisher Natl Institute of Standards & Technology
              Software Diagnostics & Con
                        Backup file comment record:
                            DI-128
              16:56:07  Backup file E:\IMG.001 opened for access.
              16:56:16  The destination drive capacity is smaller than that of the
                        original source drive.
              16:56:25  Restore of drive 1: from E:\IMG.001
                        to drive 2: started on Nov 13, 2001 16:56
              16:56:25  Partition fixup has been disabled.
              16:56:25  Local SafeBack is running on DOS 7.10
                        Source drive 1:
                            Capacity........8759 MB
                            Cylinders.......1116
                            Heads...........255
                        Destination drive 2:
                            Capacity........8751 MB
                            Cylinders.......1115
                            Heads...........255
              17:03:00  Backup file E:\IMG.002 opened for access.
              17:09:39  Backup file E:\IMG.003 opened for access.
              17:16:20  Backup file E:\IMG.004 opened for access.
              17:23:04  Backup file E:\IMG.005 opened for access.
              17:24:58  Restore of drive 1: to drive 2: completed on Nov 13, 2001 17:24
              17:50:40  Menu selections:
                            Function:          Restore
                            Direct access:     No
                            Use XBIOS:         Yes
                            Adjust partitions: No
                            Backfill on restore:  No
                        SafeBack execution ended on Nov 13, 2001 17:50.
              = = = = Measurement Logs = = = =
              Sectors Compared 17921835
              Sectors Differ 0
              Diffs range
              Source (17938985) has 17150 more sectors than destination (17921835)
```

Case DI-128 for SafeBack 2.18	
	Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-129 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk and the source contains a FAT16 partition where the source disk is smaller than the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Tue Dec 11 13:35:18 2001
PC:	Wimsey
Disks:	Source: DOS Drive 81 Physical Label E3 Destination: DOS Drive 82 Physical Label E2 Image media: DOS Drive 80 Physical Label A7 E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-129 Wimsey 81 E2 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16X-SS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001333332 0000/001/01 0082/254/63 06 Fat16
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-129 Host C:\IMG.001 680 AE /comment None Change byte 680 of file C:\IMG.001 from 0x69 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-129 Wimsey 81 /all /new_log /comment JRL(E2) Z:\ss\PARTAB.EXE DI-129 Wimsey 82 /all /new_log /comment JRL(E2) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-129 Wimsey 81 E3 82 E2 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-129 Wimsey 81 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-129
Log File Highlights:	Source disk Drive 0x81, BIOS: Extensions Present Interrupt 13 bios 1022/254/63 (max cyl/hd values) Interrupt 13 ext 01023/255/63 (number of cyl/hd) 17938985 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 06 Fat16 2 X 002249100 007181055 0140/000/01 0586/254/63 05 extended 3 S 000000063 000208782 0140/001/01 0152/254/63 83 Linux 4 x 000208845 000144585 0153/000/01 0161/254/63 05 extended 5 S 000000063 000144522 0153/001/01 0161/254/63 06 Fat16 6 x 004450005 000192780 0417/000/01 0428/254/63 05 extended 7 S 000000063 000192717 0417/001/01 0428/254/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 009430155 006152895 0587/000/01 0969/254/63 83 Linux 10 P 017510850 000417690 1023/000/01 1023/254/63 82 Linux swap

```
Case DI-129 for SafeBack 2.18
            Destination disk Drive 0x82, BIOS: Extensions Present
            Interrupt 13  bios  1022/254/63 (max cyl/hd values)
            Interrupt 13  ext  01023/255/63 (number of cyl/hd)
            17938985 total number of sectors reported via interrupt 13 from the BIOS
             N   Start LBA Length    Start C/H/S End C/H/S   boot Partition type
             1 P 000000063 001333332 0000/001/01 0082/254/63      06 Fat16
             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
            Safeback log: DI-129/SB_129B.TXT
                    SafeBack 2.18 13Feb01 execution started on Dec 11, 2001 13:49.
            13:49:09  Menu selections:
                       Function:            Backup
                       Direct access:       No
                       Use XBIOS:           Yes
                       Adjust partitions:   No
                       Backfill on restore: No
            13:49:57  Backup file C:\IMG.001 created.
                      Backup file comment record:
                        DI-129
            13:50:04  Backing up drive D:
                        to C:\IMG.001 on Dec 11, 2001 13:50
            13:50:05  Local SafeBack is running on DOS 7.10
                      Source drive D:
                        Capacity........604 MB
                        Cylinders.......76
                        Heads...........255
            13:51:47  Backup file CRC: 361e1960.
            13:51:47  Backup of drive D: completed on Dec 11, 2001 13:51.
                      SafeBack execution ended on Dec 11, 2001 13:52.
            Safeback log: DI-129/SB_129R.TXT
                    SafeBack 2.18 13Feb01 execution started on Dec 11, 2001 13:53.
            13:53:57  Menu selections:
                       Function:            Restore
                       Direct access:       No
                       Use XBIOS:           Yes
                       Adjust partitions:   No
                       Backfill on restore: No
            13:54:08  Backup file created on Dec 11, 2001 13:50
                       by Gary Fisher Natl Institute of Standards & Technology
            Software Diagnostics & Con
                      Backup file comment record:
                        DI-129
            13:54:10  Backup file C:\IMG.001 opened for access.
            13:54:32  Partition/Boot information saved to A:\PT.SPS.
            13:54:33  Restore of drive D: from C:\IMG.001
                        to drive E: started on Dec 11, 2001 13:54
            13:54:33  Partition fixup has been disabled.
            13:54:33  Local SafeBack is running on DOS 7.10
                      Source drive D:
                        Capacity........604 MB
                        Cylinders.......76
                        Heads...........255
                      Destination drive E:
                        Capacity........651 MB
                        Cylinders.......82
                        Heads...........255
            13:54:33  IMG.001, record 0 has a CRC error. cf72 was expected, but 4ad4
            read.
            13:54:37  Backup file CRC error ignored by recovery at sector 0.
            13:54:39  Data starting at sector 0 and the next 119 sectors is
                      questionable due to CRC errors.
            13:56:26  CRC mismatch:  Calculated: 1be33940, Read: 361e1960
            13:56:32  Restore of drive D: to drive E: completed on Dec 11, 2001 13:56
            13:56:42  Menu selections:
                       Function:            Restore
                       Direct access:       No
                       Use XBIOS:           Yes
                       Adjust partitions:   No
                       Backfill on restore: No
```

Case DI-129 for SafeBack 2.18	
	SafeBack execution ended on Dec 11, 2001 13:56.
	= = = = Measurement Logs = = = =
	Sectors Compared 1236942
	Sectors Differ 1
	Diffs range: 0
	Source (1236942) has 96390 fewer sectors than destination (1333332)
	Zero fill: 0
	Src Byte fill (E3): 0
	Dst Byte fill (E2): 96390
	Other fill: 0
	Other no fill: 0
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged
	image verification error
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-130 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk
	to an XBIOS-SCSI destination disk
	and the source contains a FAT32 partition
	where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Fri Dec 14 08:10:18 2001
PC:	JudgeDee
Disks:	Source: DOS Drive 81 Physical Label EC
	Destination: DOS Drive 82 Physical Label E2
	Image media: DOS Drive 80 Physical Label A7
	EC is a SEAGATE ST39204LC with 17921835 sectors
	E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors
	A7 is a WDC WD200BB-00AUA1 with 39102336 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32
	Disk: EC
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Thu Dec 13 13:29:12 2001
	cmd: Z:\ss\DISKWIPE.EXE EC JudgeDee 80 EC /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\f32-src.txt
	Load Operating System to Source disk
	cmd: Z:\ss\DISKHASH.EXE EC JudgeDee 80 /before /new_log
	Disk hash = 2EB2013AAAA6079C0360E4B87E6F44CDC2072564
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-130 JudgeDee 81 E2 /noask /dst /new_log /comment
	JRL
	X:\PM\PQMAGIC /cmd=X:\PM\D32X-SS.txt
	N Start LBA Length Start C/H/S End C/H/S boot Partition type
	1 P 000000063 001333332 0000/001/01 0082/254/63 0B Fat32
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-130 JudgeDee 81 /all /new_log /comment JRL(E2)
	Z:\ss\PARTAB.EXE DI-130 JudgeDee 82 /all /new_log /comment JRL(E2)
	z:\sb\master (backup to image)
	z:\sb\master (restore from image)
	Z:\ss\PARTCMP.EXE DI-130 JudgeDee 81 EC 82 E2 /new_log /comment JRL
	/select 1 1
	Z:\ss\DISKHASH.EXE DI-130 JudgeDee 81 /comment JRL(EC) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-130
Log File Highlights:	Source disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17921835 total number of sectors reported via interrupt 13 from the BIOS
	N Start LBA Length Start C/H/S End C/H/S boot Partition type

```
Case DI-130 for SafeBack 2.18
            1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 0B Fat32
            2 X 001429785 015872220 0089/000/01 1023/254/63      0F extended
            3 S 000000063 000208782 0089/001/01 0101/254/63      83 Linux
            4 x 000208845 000144585 0102/000/01 0110/254/63      05 extended
            5 S 000000063 000144522 0102/001/01 0110/254/63      0B Fat32
            6 x 000771120 000192780 0137/000/01 0148/254/63      05 extended
            7 S 000000063 000192717 0137/001/01 0148/254/63      16 other
            8 S 000000000 000000000 0000/000/00 0000/000/00      00 empty entry
            9 P 017302005 000064260 1023/000/01 1023/254/63      83 Linux
           10 P 017494785 000417690 1023/000/01 1023/254/63      82 Linux swap
           Destination disk Drive 0x82, BIOS: Extensions Present
           Interrupt 13  bios  1022/254/63 (max cyl/hd values)
           Interrupt 13  ext   01023/255/63 (number of cyl/hd)
           17938985 total number of sectors reported via interrupt 13 from the BIOS
            N   Start LBA Length    Start C/H/S End C/H/S   boot Partition type
            1 P 000000063 001333332 0000/001/01 0082/254/63      0B Fat32
            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
           Safeback log: DI-130/SB_130B.TXT
                   SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 08:35.
           08:35:15  Menu selections:
                      Function:            Backup
                      Direct access:       No
                      Use XBIOS:           Yes
                      Adjust partitions:   No
                      Backfill on restore: No
           08:36:09  Backup file F:\IMG.001 created.
                     Backup file comment record:
                      DI-130
           08:36:15  Backing up drive D:
                     to F:\IMG.001 on Dec 14, 2001 08:36
           08:36:16  Local SafeBack is running on DOS 7.10
                     Source drive D:
                       Capacity........604 MB
                       Cylinders.......76
                       Heads...........255
           08:38:04  Backup file CRC: 4b1656d4.
           08:38:04  Backup of drive D: completed on Dec 14, 2001 08:38.
                     SafeBack execution ended on Dec 14, 2001 08:38.
           Safeback log: DI-130/SB_130R.TXT
                   SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 08:38.
           08:39:00  Menu selections:
                      Function:            Restore
                      Direct access:       No
                      Use XBIOS:           Yes
                      Adjust partitions:   No
                      Backfill on restore: No
           08:39:14  Backup file created on Dec 14, 2001 08:36
                      by Gary Fisher Natl Institute of Standards & Technology
           Software Diagnostics & Con
                     Backup file comment record:
                      DI-130
           08:39:16  Backup file F:\IMG.001 opened for access.
           08:39:29  Partition/Boot information saved to A:\PT.SPS.
           08:39:30  Restore of drive D: from F:\IMG.001
                     to drive E: started on Dec 14, 2001 08:39
           08:39:30  Partition fixup has been disabled.
           08:39:30  Local SafeBack is running on DOS 7.10
                     Source drive D:
                       Capacity........604 MB
                       Cylinders.......76
                       Heads...........255
                     Destination drive E:
                       Capacity........651 MB
                       Cylinders.......82
                       Heads...........255
           08:41:16  The whole-file CRC verifies:  4b1656d4
           08:41:19  Restore of drive D: to drive E: completed on Dec 14, 2001 08:41
           08:41:28  Menu selections:
```

Case DI-130 for SafeBack 2.18	
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Dec 14, 2001 08:41.
	= = = = Measurement Logs = = = =
	Sectors Compared 1236942
	Sectors Differ 1
	Diffs range: 1
	Source (1236942) has 96390 fewer sectors than destination (1333332)
	Zero fill: 0
	Src Byte fill (EC): 0
	Dst Byte fill (E2): 96390
	Other fill: 0
	Other no fill: 0
	Hash after test: 2EB2013AAAA6079C0360E4B87E6F44CDC2072564
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst
Actual Results:	FAT32 anomaly, Backfill anomaly
Analysis:	Expected results not achieved

Case DI-137 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk
	to an XBIOS-SCSI destination disk
	and the source contains a FAT16 partition
	where the source disk is the same size as the destination
	Introduce a read error from the source.
Tester Name:	JRL
Test Date:	Sat Jun 22 08:54:09 2002
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label E3
	Destination: DOS Drive 81 Physical Label E8
	Image media: DOS Drive 80 Physical Label 65
	E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors
	E8 is a SEAGATE ST318404LC with 35843670 sectors
	65 is a WDCWD64AA with 12594960 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16
	Disk: E3
	Host: Cadfael
	Operator: JRL
	OS: Linux Red Hat 7.1/Windows Me
	Date: Sat Jul 21 16:17:29 2001
	DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\fat-src.txt
	Load Operating System to Source disk
	DISKHASH.EXE E3_SRC Rumpole 80 /before
	Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI137 Cadfael 81 E8 /noask /dst /new_log /comment JRL
	X:\PM\PQMAGIC /cmd=X:\PM\D16X-ES.txt
	See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 80 30 1 4 2 10 >> A:\err-137.txt
	Z:\ss\baddisk 80 30 1 4 10 10 >> A:\err-137.txt
	Version 3.2 Created 06/05/02 at 13:50:39
	baddisk compiled on 06/05/02 at 12:19:31
	return code 00010 on command 00002 from disk 00081
	at address 00030/00001/00004
	return code 00010 on command 00010 from disk 00081
	at address 00030/00001/00004
Execute:	z:\sb\master (backup to image)
	z:\sb\master (restore from image)
	Z:\ss\PARTCMP.EXE DI137 Cadfael 80 E3 81 E8 /new_log /comment JRL /select
	1 1
	Z:\ss\DISKHASH.EXE DI137 Cadfael 80 /comment E3(JRL) /new_log /after

Case DI-137 for SafeBack 2.18	
Log files loc:	test-archive/sb/sb-2.18/DI137

Log File Highlights:	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 06 Fat16
	 2 X 002249100 007181055 0140/000/01 0586/254/63 05 extended
	 3 S 000000063 000208782 0140/001/01 0152/254/63 83 Linux
	 4 x 000208845 000144585 0153/000/01 0161/254/63 05 extended
	 5 S 000000063 000144522 0153/001/01 0161/254/63 06 Fat16
	 6 x 004450005 000192780 0417/000/01 0428/254/63 05 extended
	 7 S 000000063 000192717 0417/001/01 0428/254/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 009430155 006152895 0587/000/01 0969/254/63 83 Linux
	10 P 017510850 000417690 1023/000/01 1023/254/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	35843670 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 06 Fat16
	 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
	Safeback log: DI-137/SB_137B.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 22, 2002 09:33.
	09:33:40 Menu selections:
	            Function: Backup
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	09:33:57 Backup file C:\IMG.001 created.
	            Backup file comment record:
	             DI-137
	09:34:03 Backing up drive D:
	            to C:\IMG.001 on Jun 22, 2002 09:34
	09:34:04 Local SafeBack is running on DOS 7.10
	            Source drive D:
	             Capacity........604 MB
	             Cylinders.......76
	             Heads...........255
	09:35:06 While reading drive D: a bad address mark error (status 02)
	occurred:
	            at relative sector 481953 (Cylinder 30, Head 0, Sector 4)
	09:36:41 Backup file CRC: 9cf5032d.
	09:36:42 Backup of drive D: completed on Jun 22, 2002 09:36.
	            SafeBack execution ended on Jun 22, 2002 09:36.
	Safeback log: DI-137/SB_137R.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 22, 2002 09:46.
	09:46:26 Menu selections:
	            Function: Restore
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	09:46:41 Backup file created on Jun 22, 2002 09:34
	            by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	            Backup file comment record:
	             DI-137
	09:46:45 Backup file C:\IMG.001 opened for access.
	09:46:56 Partition/Boot information saved to A:\PT.SPS.
	09:46:57 Restore of drive D: from C:\IMG.001
	            to drive D: started on Jun 22, 2002 09:46
	09:46:57 Local SafeBack is running on DOS 7.10
	            Source drive D:
	             Capacity........604 MB

Case DI-137 for SafeBack 2.18	
	Cylinders.......76
	Heads...........255
	Destination drive D:
	Capacity........604 MB
	Cylinders.......76
	Heads...........255
	09:47:42 The image for D: shows that a bad address mark error (status 02) occurred
	during backup at relative sector 481953 (Cylinder 30, Head 0, Sector 4)
	09:48:50 The whole-file CRC verifies: 9cf5032d
	09:49:58 Restore of drive D: to drive D: completed on Jun 22, 2002 09:49
	09:50:07 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	SafeBack execution ended on Jun 22, 2002 09:50.
	= = = = Measurement Logs = = = =
	Sectors Compared 1236942
	Sectors Differ 1
	Diffs range: 481953
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst
	error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-138 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk
	to an XBIOS-SCSI destination disk
	and the source contains a FAT32 partition
	where the source disk is the same size as the destination
	Introduce a write error to the destination.
Tester Name:	JRL
Test Date:	Sun Jun 16 16:55:48 2002
PC:	Wimsey
Disks:	Source: DOS Drive 80 Physical Label E4
	Destination: DOS Drive 81 Physical Label E8
	Image media: DOS Drive 80 Physical Label CB
	E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors
	E8 is a SEAGATE ST318404LC with 35843670 sectors
	CB is a SEAGATE ST336705LC with 71687370 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32
	Disk: E4
	Host: JudgeDee
	Operator: JRL
	OS: Windows 2000/NT
	Date: Sat Jul 21 16:58:28 2001
	DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000 source disk
	X:\pm\pqmagic /cmd=X:\pm\nt-src.txt
	Load Operating System to Source disk
	cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before
	Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-138 Wimsey 81 E8 /noask /dst /new_log /comment JRL
	X:\PM\PQMAGIC /cmd=X:\PM\D32X-ES.txt
	See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 81 23 23 23 3 10 >> A:\err-138.txt
	Version 3.2 Created 06/05/02 at 13:50:39
	baddisk compiled on 06/05/02 at 12:19:31
	return code 00010 on command 00003 from disk 00081

Case DI-138 for SafeBack 2.18	
	at address 00023/00023/00023
Execute:	z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-138 Wimsey 80 E4 81 E8 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-138 Wimsey 80 /comment E4(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-138

Log File Highlights:	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 006152832 0000/001/01 0382/254/63 Boot 0B Fat32
	 2 X 008193150 009735390 0510/000/01 1023/254/63 0F extended
	 3 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 4 x 002056320 001237005 0638/000/01 0714/254/63 05 extended
	 5 S 000000063 001236942 0638/001/01 0714/254/63 07 NTFS
	 6 x 005349645 001638630 0843/000/01 0944/254/63 05 extended
	 7 S 000000063 001638567 0843/001/01 0944/254/63 17 other
	 8 x 008498385 001237005 1023/000/01 1023/254/63 05 extended
	 9 S 000000063 001236942 1023/001/01 1023/254/63 1B other
	10 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	11 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	12 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	35843670 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 006152832 0000/001/01 0382/254/63 0B Fat32
	 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
	Safeback log: DI-138/SB_138B.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 17:24.
	17:25:03 Menu selections:
	            Function: Backup
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	17:25:21 Backup file D:\IMG.001 created.
	          Backup file comment record:
	            DI-138
	17:25:30 Backing up drive C:
	          to D:\IMG.001 on Jun 16, 2002 17:25
	17:25:32 Local SafeBack is running on DOS 7.10
	          Source drive C:
	            Capacity........3004 MB
	            Cylinders.......382
	            Heads...........255
	17:28:16 Backup file D:\IMG.002 created.
	17:29:31 Backup file CRC: b4ff226a.
	17:29:31 Backup of drive C: completed on Jun 16, 2002 17:29.
	          SafeBack execution ended on Jun 16, 2002 17:33.
	Safeback log: DI-138/SB_138R.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 16, 2002 17:42.
	17:42:35 Menu selections:
	            Function: Restore
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	17:42:44 Backup file created on Jun 16, 2002 17:25
	          by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	          Backup file comment record:
	            DI-138
	17:42:46 Backup file C:\IMG.001 opened for access.

Case DI-138 for SafeBack 2.18	

	17:43:07 Partition/Boot information saved to A:\PT.SPS.
	17:43:07 Restore of drive C: from C:\IMG.001
	          to drive D: started on Jun 16, 2002 17:43
	17:43:07 Local SafeBack is running on DOS 7.10
	          Source drive C:
	            Capacity........3004 MB
	            Cylinders.......382
	            Heads...........255
	          Destination drive D:
	            Capacity........3004 MB
	            Cylinders.......382
	            Heads...........255
	17:43:32 While writing drive D:, a bad address mark error (status 02) occurred
	          at relative sector 370903 (Cylinder 23, Head 22, Sector 23)
	17:48:04 Backup file C:\IMG.002 opened for access.
	17:50:21 The whole-file CRC verifies: b4ff226a
	17:51:33 Restore of drive C: to drive D: completed on Jun 16, 2002 17:51
	17:52:02 Menu selections:
	            Function: Restore
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	          SafeBack execution ended on Jun 16, 2002 17:52.
	= = = = Measurement Logs = = = =
	Sectors Compared 6152832
	Sectors Differ 21
	Diffs range: 1, 370903-370922
	Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF

Expected Results:	Source disk is unchanged src compares qualified equal to dst error message logged
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-139 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk and the source contains a FAT32 partition where the source disk is the same size as the destination Introduce a read error reading from the image.
Tester Name:	JRL
Test Date:	Sat Jun 22 09:28:54 2002
PC:	Wimsey
Disks:	Source: DOS Drive 80 Physical Label E4 Destination: DOS Drive 81 Physical Label E2 Image media: DOS Drive 80 Physical Label 64 E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors 64 is a WDCWD64AA with 12594960 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32 Disk: E4 Host: JudgeDee Operator: JRL OS: Windows 2000/NT Date: Sat Jul 21 16:58:28 2001 DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000 source disk X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination	Z:\ss\DISKWIPE.EXE DI-139 Wimsey 81 E2 /noask /dst /new_log /comment JRL

Case DI-139 for SafeBack 2.18	
Setup:	X:\PM\PQMAGIC /cmd=X:\PM\D32X-ES.txt See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 80 5 7 1 2 10 >> A:\err-139.txt Z:\ss\baddisk 80 5 7 1 10 10 >> A:\err-139.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00002 from disk 00080 at address 00005/00007/00001 return code 00010 on command 00010 from disk 00080 at address 00005/00007/00001
Execute:	z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-139 Wimsey 80 E4 81 E2 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-139 Wimsey 80 /comment E4(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-139

Log File Highlights:	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 006152832 0000/001/01 0382/254/63 Boot 0B Fat32
	 2 X 008193150 009735390 0510/000/01 1023/254/63 0F extended
	 3 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 4 x 002056320 001237005 0638/000/01 0714/254/63 05 extended
	 5 S 000000063 001236942 0638/001/01 0714/254/63 07 NTFS
	 6 x 005349645 001638630 0843/000/01 0944/254/63 05 extended
	 7 S 000000063 001638567 0843/001/01 0944/254/63 17 other
	 8 x 008498385 001237005 1023/000/01 1023/254/63 05 extended
	 9 S 000000063 001236942 1023/001/01 1023/254/63 1B other
	10 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	11 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	12 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 006152832 0000/001/01 0382/254/63 0B Fat32
	 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
	Safeback log: DI-139/SB_139B.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 22, 2002 10:07.
	10:07:44 Menu selections:
	            Function: Backup
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	10:08:01 Backup file C:\IMG.001 created.
	            Backup file comment record:
	             DI-139
	10:08:14 Backing up drive D:
	            to C:\IMG.001 on Jun 22, 2002 10:08
	10:08:15 Local SafeBack is running on DOS 7.10
	            Source drive D:
	              Capacity........3004 MB
	              Cylinders.......382
	              Heads...........255
	10:19:20 Backup file C:\IMG.002 created.
	10:24:53 Backup file CRC: 23b4b171.
	10:24:53 Backup of drive D: completed on Jun 22, 2002 10:24.
	            SafeBack execution ended on Jun 22, 2002 10:25.
	Safeback log: DI-139/SB_139R.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 22, 2002 10:28.
	10:28:14 Menu selections:
	            Function: Restore
	            Direct access: No

Case DI-139 for SafeBack 2.18	

	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	10:28:24 Backup file created on Jun 22, 2002 10:08
	          by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	         Backup file comment record:
	           DI-139
	10:28:27 Backup file C:\IMG.001 opened for access.
	10:28:47 Partition/Boot information saved to A:\PT.SPS.
	10:28:47 Restore of drive D: from C:\IMG.001
	         to drive D: started on Jun 22, 2002 10:28
	10:28:47 Local SafeBack is running on DOS 7.10
	         Source drive D:
	           Capacity........3004 MB
	           Cylinders.......382
	           Heads..........255
	         Destination drive D:
	           Capacity.......3004 MB
	           Cylinders......382
	           Heads..........255
	10:29:44 While reading C:\IMG.001 at 28217801, an access denied error
	occurred on the backup file. A
	         data block consisting of zeroes was used in place of the data
	to
	         be read. As a result, another error message will follow this
	         one.
	10:29:44 IMG.001, record 68068 has a CRC error. 0e70 was expected, but
	7ddf read.
	10:30:04 Backup file CRC error ignored by recovery at sector 68068.
	10:30:40 Data starting at sector 68068 and the next 119 sectors is
	         questionable due to CRC errors.
	10:37:18 Backup file C:\IMG.002 opened for access.
	10:40:22 CRC mismatch: Calculated: 23d8afa0, Read: 23b4b171
	10:49:24 Restore of drive D: to drive D: completed on Jun 22, 2002 10:49
	10:49:31 Menu selections:
	          Function: Restore
	          Direct access: No
	          Use XBIOS: Auto
	          Adjust partitions: Auto
	          Backfill on restore: Yes
	         SafeBack execution ended on Jun 22, 2002 10:49.
	= = = = Measurement Logs = = = =
	Sectors Compared 6152832
	Sectors Differ 120
	Diffs range: 1, 68068-68186
	Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF

Expected Results:	Source disk is unchanged error message logged
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-140 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk and the source contains a FAT16 partition where the source disk is the same size as the destination Introduce a write error writing to the image.
Tester Name:	JRL
Test Date:	Sun Jun 23 10:40:50 2002
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label E3 Destination: DOS Drive 81 Physical Label E8 Image media: DOS Drive 80 Physical Label 65 E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E8 is a SEAGATE ST318404LC with 35843670 sectors 65 is a WDCWD64AA with 12594960 sectors Jaz disk with partition magic and scripts

Case DI-140 for SafeBack 2.18	
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-140 Cadfael 81 E8 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16X-ES.txt See CMPPTLOG.TXT for partition table
Error Setup:	Z:\ss\baddisk 80 13 13 13 3 10 >> A:\err-140.txt Version 3.2 Created 06/05/02 at 13:50:39 baddisk compiled on 06/05/02 at 12:19:31 return code 00010 on command 00003 from disk 00080 at address 00013/00013/00013
Execute:	z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-140 Cadfael 80 E3 81 E8 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-140 Cadfael 80 /comment E3(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-140

Log File Highlights:	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 06 Fat16
	 2 X 002249100 007181055 0140/000/01 0586/254/63 05 extended
	 3 S 000000063 000208782 0140/001/01 0152/254/63 83 Linux
	 4 x 000208845 000144585 0153/000/01 0161/254/63 05 extended
	 5 S 000000063 000144522 0153/001/01 0161/254/63 06 Fat16
	 6 x 004450005 000192780 0417/000/01 0428/254/63 05 extended
	 7 S 000000063 000192717 0417/001/01 0428/254/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 009430155 006152895 0587/000/01 0969/254/63 83 Linux
	10 P 017510850 000417690 1023/000/01 1023/254/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	35843670 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 06 Fat16
	 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
	Safeback log: DI-140/SB_140B.TXT
	        SafeBack 2.18 13Feb01 execution started on Jun 23, 2002 11:15.
	11:15:12 Menu selections:
	            Function: Backup
	            Direct access: No
	            Use XBIOS: Auto
	            Adjust partitions: Auto
	            Backfill on restore: Yes
	11:15:34 Backup file C:\IMG.001 created.
	          Backup file comment record:
	            DI-140
	11:15:39 Backing up drive D:
	          to C:\IMG.001 on Jun 23, 2002 11:15
	11:15:40 Local SafeBack is running on DOS 7.10
	          Source drive D:
	            Capacity........604 MB

Case DI-140 for SafeBack 2.18	
	Cylinders.......76
	Heads..........255
	11:16:08 An unrecoverable file error was reported while writing backup
	file IMG.001. The session is terminated.
	11:16:34 Backup terminated by user or error on Jun 23, 2002 11:16.
	11:16:49 The backup file is imcomplete and has not been deleted.
	SafeBack execution ended on Jun 23, 2002 11:16.
	Safeback log: DI-140/SB_140R.TXT
	SafeBack 2.18 13Feb01 execution started on Jun 23, 2002 11:24.
	11:24:57 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	11:25:06 Backup file created on Jun 23, 2002 11:15
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-140
	11:25:08 Backup file C:\IMG.001 opened for access.
	11:25:27 Partition/Boot information saved to A:\PT.SPS.
	11:25:28 Restore of drive D: from C:\IMG.001
	to drive D: started on Jun 23, 2002 11:25
	11:25:28 Local SafeBack is running on DOS 7.10
	Source drive D:
	Capacity........604 MB
	Cylinders.......76
	Heads..........255
	Destination drive D:
	Capacity........604 MB
	Cylinders.......76
	Heads..........255
	11:25:48 An unexpected end-of-file occurred while reading IMG.001 for
	the
	record for sector 212891.
	11:26:17 Restore operation terminated by error or user.
	11:26:21 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	SafeBack execution ended on Jun 23, 2002 11:26.
	= = = = Measurement Logs = = = =
	Sectors Compared 1236942
	Sectors Differ 1024051
	Diffs range: 212891-1236941
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged error message logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-141 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk and the source contains a FAT32 partition where the source disk is the same size as the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Mon Dec 17 13:48:20 2001
PC:	Wimsey
Disks:	Source: DOS Drive 81 Physical Label EC Destination: DOS Drive 82 Physical Label E2 Image media: DOS Drive 80 Physical Label A7 EC is a SEAGATE ST39204LC with 17921835 sectors E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors

Case DI-141 for SafeBack 2.18	
	A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32 Disk: EC Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Dec 13 13:29:12 2001 cmd: Z:\ss\DISKWIPE.EXE EC JudgeDee 80 EC /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE EC JudgeDee 80 /before /new_log Disk hash = 2EB2013AAAA6079C0360E4B87E6F44CDC2072564
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-141 Wimsey 81 E2 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32X-ES.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001236942 0000/001/01 0076/254/63 0B Fat32
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-141 Host C:\IMG.001 3869 AE /comment None Change byte 3869 of file C:\IMG.001 from 0x00 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-141 Wimsey 81 /all /new_log /comment JRL(E2) Z:\ss\PARTAB.EXE DI-141 Wimsey 82 /all /new_log /comment JRL(E2) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-141 Wimsey 81 EC 82 E2 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-141 Wimsey 81 /comment JRL(EC) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-141

Log File Highlights:	Source disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17921835 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 0B Fat32
	 2 X 001429785 015872220 0089/000/01 1023/254/63 0F extended
	 3 S 000000063 000208782 0089/000/01 0101/254/63 83 Linux
	 4 x 000208845 000144585 0102/000/01 0110/254/63 05 extended
	 5 S 000000063 000144522 0102/001/01 0110/254/63 0B Fat32
	 6 x 000771120 000192780 0137/000/01 0148/254/63 05 extended
	 7 S 000000063 000192717 0137/001/01 0148/254/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 017302005 000064260 1023/000/01 1023/254/63 83 Linux
	10 P 017494785 000417690 1023/000/01 1023/254/63 82 Linux swap
	Destination disk Drive 0x82, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 0B Fat32
	 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
	Safeback log: DI-141/SB_141B.TXT
	        SafeBack 2.18 13Feb01 execution started on Dec 17, 2001 14:13.
	14:13:07 Menu selections:
	            Function: Backup
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: No
	14:13:35 Backup file C:\IMG.001 created.
	          Backup file comment record:
	            DI-141
	14:13:42 Backing up drive D:
	            to C:\IMG.001 on Dec 17, 2001 14:13

Case DI-141 for SafeBack 2.18	

	14:13:43 Local SafeBack is running on DOS 7.10
	          Source drive D:
	            Capacity........604 MB
	            Cylinders.......76
	            Heads..........255
	14:15:25 Backup file CRC: 4634c6f8.
	14:15:25 Backup of drive D: completed on Dec 17, 2001 14:15.
	          SafeBack execution ended on Dec 17, 2001 14:15.
	          SafeBack 2.18 13Feb01 execution started on Dec 17, 2001 14:16.
	          SafeBack execution ended on Dec 17, 2001 14:16.
	Safeback log: DI-141/SB_141R.TXT
	          SafeBack 2.18 13Feb01 execution started on Dec 17, 2001 14:17.
	14:17:30 Menu selections:
	            Function: Restore
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: No
	14:17:43 Backup file created on Dec 17, 2001 14:13
	          by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	          Backup file comment record:
	            DI-141
	14:17:47 Backup file C:\IMG.001 opened for access.
	14:18:00 Partition/Boot information saved to A:\PT.SPS.
	14:18:01 Restore of drive D: from C:\IMG.001
	          to drive E: started on Dec 17, 2001 14:18
	14:18:01 Partition fixup has been disabled.
	14:18:01 Local SafeBack is running on DOS 7.10
	          Source drive D:
	            Capacity........604 MB
	            Cylinders.......76
	            Heads..........255
	          Destination drive E:
	            Capacity.......604 MB
	            Cylinders.......76
	            Heads..........255
	14:18:01 IMG.001, record 0 has a CRC error. 9850 was expected, but 5726 read.
	14:18:10 Backup file CRC error ignored by recovery at sector 0.
	14:18:12 Data starting at sector 0 and the next 119 sectors is
	          questionable due to CRC errors.
	14:19:59 CRC mismatch: Calculated: b391cfbb, Read: 4634c6f8
	14:20:03 Restore of drive D: to drive E: completed on Dec 17, 2001 14:20
	14:20:12 Menu selections:
	            Function: Restore
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: No
	          SafeBack execution ended on Dec 17, 2001 14:20.
	= = = = Measurement Logs = = = =
	Sectors Compared 1236942
	Sectors Differ 2
	Diffs range: 1, 7
	Hash after test: 2EB2013AAAA6079C0360E4B87E6F44CDC2072564

Expected Results:	Source disk is unchanged image verification error
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-142 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk and the source contains a FAT16 partition where the source disk is the same size as the destination
Tester Name:	JRL
Test Date:	Mon Dec 10 08:34:19 2001

Case DI-142 for SafeBack 2.18	
PC:	Wimsey
Disks:	Source: DOS Drive 81 Physical Label E3 Destination: DOS Drive 82 Physical Label E2 Image media: DOS Drive 80 Physical Label A7 E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-142 Wimsey 81 E2 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16X-ES.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001236942 0000/001/01 0076/254/63 06 Fat16
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-142 Wimsey 81 /all /new_log /comment JRL(E2) Z:\ss\PARTAB.EXE DI-142 Wimsey 82 /all /new_log /comment JRL(E2) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-142 Wimsey 81 E3 82 E2 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-142 Wimsey 81 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-142

Log File
Highlights:
	Source disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 06 Fat16
	 2 X 002249100 007181055 0140/000/01 0586/254/63 05 extended
	 3 S 000000063 000208782 0140/001/01 0152/254/63 83 Linux
	 4 x 000208845 000144585 0153/000/01 0161/254/63 05 extended
	 5 S 000000063 000144522 0153/001/01 0161/254/63 06 Fat16
	 6 x 000450005 000192780 0417/000/01 0428/254/63 05 extended
	 7 S 000000063 000192717 0417/001/01 0428/254/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 009430155 006152895 0587/000/01 0969/254/63 83 Linux
	10 P 017510850 000417690 1023/000/01 1023/254/63 82 Linux swap
	Destination disk Drive 0x82, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 06 Fat16
	 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
	Safeback log: DI-142/SB_142B.TXT
	        SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 09:00.
	09:00:28 Menu selections:
	            Function: Backup
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: No
	09:01:19 Backup file F:\IMG.001 created.

Case DI-142 for SafeBack 2.18	
	Backup file comment record:
	DI-142
	09:01:31 Backing up drive D:
	to F:\IMG.001 on Dec 10, 2001 09:01
	09:01:33 Local SafeBack is running on DOS 7.10
	Source drive D:
	Capacity........604 MB
	Cylinders.......76
	Heads...........255
	09:03:20 Backup file CRC: d88c8e2f.
	09:03:20 Backup of drive D: completed on Dec 10, 2001 09:03.
	SafeBack execution ended on Dec 10, 2001 09:03.
	Safeback log: DI-142/SB_142R.TXT
	SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 09:04.
	09:04:32 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	09:04:48 Backup file created on Dec 10, 2001 09:01
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-142
	09:04:51 Backup file F:\IMG.001 opened for access.
	09:05:03 Partition/Boot information saved to A:\PT.SPS.
	09:05:04 Restore of drive D: from F:\IMG.001
	to drive E: started on Dec 10, 2001 09:05
	09:05:04 Partition fixup has been disabled.
	09:05:04 Local SafeBack is running on DOS 7.10
	Source drive D:
	Capacity........604 MB
	Cylinders.......76
	Heads...........255
	Destination drive E:
	Capacity.......604 MB
	Cylinders.......76
	Heads...........255
	09:06:50 The whole-file CRC verifies: d88c8e2f
	09:06:50 Restore of drive D: to drive E: completed on Dec 10, 2001 09:06
	09:06:58 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Dec 10, 2001 09:07.
	= = = = Measurement Logs = = = =
	Sectors Compared 1236942
	Sectors Differ 0
	Diffs range:
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged src compares equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-145 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk and the source contains a FAT32 partition where the source disk is the same size as the destination Create the image on a removable medium. Introduce an error on the image.
Tester Name:	JRL
Test Date:	Tue Jun 25 08:14:50 2002
PC:	JudgeDee

Case DI-145 for SafeBack 2.18	
Disks:	Source: DOS Drive 80 Physical Label 1E Destination: DOS Drive 81 Physical Label E2 Image media: DOS Drive 80 Physical Label Jaz 1E is a QUANTUM ATLAS10K3_18_SCA with 35916547 sectors E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32 Disk: 1E Host: Cadfael Operator: JRL OS: Windows/Me Options: Typical Date: Mon Jun 24 15:28:50 2002 cmd: Z:\ss\DISKWIPE.EXE 1E Cadfael 80 1E /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE 1E Cadfael 80 /before /new_log Disk hash = 4D6392101F5906A09F49A8E9A576F6C4744C63FC
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-145 JudgeDee 81 E2 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32X-ES.txt See CMPPTLOG.TXT for partition table
Error Setup:	cmd: z:\ss\CORRUPT.EXE DI-145 Cadfael X:\img.001 732984 AE /comment JRL Change byte 732984 of file X:\img.001 from 0x02 to 0xFFAE
Execute:	z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-145 Cadfael 80 1E 81 E2 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-145 Cadfael 80 /comment 1E(JRL) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-145

Log File
Highlights:
	Source disk Drive 0x80, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	35916548 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 0B Fat32
	 2 X 001429785 033865020 0089/000/01 1023/254/63 0F extended
	 3 S 000000063 000208782 0089/001/01 0101/254/63 83 Linux
	 4 x 000208845 000144585 0102/000/01 0110/254/63 05 extended
	 5 S 000000063 000144522 0102/001/01 0110/254/63 0B Fat32
	 6 x 000771120 000192780 0137/000/01 0148/254/63 05 extended
	 7 S 000000063 000192717 0137/001/01 0148/254/63 16 other
	 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry
	 9 P 035294805 000064260 1023/000/01 1023/254/63 83 Linux
	10 P 035487585 000417690 1023/000/01 1023/254/63 82 Linux swap
	Destination disk Drive 0x81, BIOS: Extensions Present
	Interrupt 13 bios 1022/254/63 (max cyl/hd values)
	Interrupt 13 ext 01023/255/63 (number of cyl/hd)
	17938985 total number of sectors reported via interrupt 13 from the BIOS
	 N Start LBA Length Start C/H/S End C/H/S boot Partition type
	 1 P 000000063 001236942 0000/001/01 0076/254/63 0B Fat32
	 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
	Safeback log: DI-145/SB_145B.TXT
	      SafeBack 2.18 13Feb01 execution started on Jun 25, 2002 14:22.
	14:22:02 Menu selections:
	        Function: Backup
	        Direct access: No
	        Use XBIOS: Auto
	        Adjust partitions: Auto
	        Backfill on restore: Yes
	14:22:09 Menu selections:
	        Function: Backup
	        Direct access: No

Case DI-145 for SafeBack 2.18	
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	14:22:30 Backup file X:\IMG.001 created.
	Backup file comment record:
	DI-145
	14:22:38 Backing up drive C:
	to X:\IMG.001 on Jun 25, 2002 14:22
	14:22:38 Local SafeBack is running on DOS 7.10
	Source drive C:
	Capacity........604 MB
	Cylinders.......76
	Heads...........255
	14:32:15 Backup file CRC: 68796db1.
	14:32:15 Backup of drive C: completed on Jun 25, 2002 14:32.
	SafeBack execution ended on Jun 25, 2002 14:37.
	Safeback log: DI-145/SB_145R.TXT
	SafeBack 2.18 13Feb01 execution started on Jun 27, 2002 12:32.
	12:32:07 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	12:32:17 Backup file volume 1 requested.
	12:32:23 Backup file created on Jun 25, 2002 14:22
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-145
	12:32:26 Backup file X:\IMG.001 opened for access.
	12:32:40 Partition/Boot information saved to A:\PT.SPS.
	12:32:41 Restore of drive C: from X:\IMG.001
	to drive C: started on Jun 27, 2002 12:32
	12:32:41 Local SafeBack is running on DOS 7.10
	Source drive C:
	Capacity........604 MB
	Cylinders.......76
	Heads...........255
	Destination drive C:
	Capacity........604 MB
	Cylinders.......76
	Heads...........255
	12:32:42 IMG.001, record 1428 has a CRC error. c5b1 was expected, but f0db read.
	12:32:48 Backup file CRC error ignored by recovery at sector 1428.
	12:33:35 Data starting at sector 1428 and the next 119 sectors is
	questionable due to CRC errors.
	12:37:08 CRC mismatch: Calculated: ecaaf057, Read: 68796db1
	12:50:58 Restore of drive C: to drive C: completed on Jun 27, 2002 12:50
	12:51:07 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Auto
	Adjust partitions: Auto
	Backfill on restore: Yes
	SafeBack execution ended on Jun 27, 2002 12:51.
	= = = = Measurement Logs = = = =
	Sectors Compared 1236942
	Sectors Differ 2
	Diffs range: 1, 1450
	Hash after test: 4D6392101F5906A09F49A8E9A576F6C4744C63FC
Expected Results:	Source disk is unchanged image verification error
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-146 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk and the source contains a FAT16 partition where the source disk is the same size as the destination Create the image on a removable medium.
Tester Name:	JRL
Test Date:	Mon Dec 10 10:48:41 2001
PC:	Wimsey
Disks:	Source: DOS Drive 81 Physical Label E3 Destination: DOS Drive 82 Physical Label E2 Image media: DOS Drive 80 Physical Label Jaz E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-146 Wimsey 81 E2 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16X-ES.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001236942 0000/001/01 0076/254/63 06 Fat16
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-146 Wimsey 81 /all /new_log /comment JRL(E2) Z:\ss\PARTAB.EXE DI-146 Wimsey 82 /all /new_log /comment JRL(E2) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-146 Wimsey 81 E3 82 E2 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-146 Morse 81 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-146
Log File Highlights:	Source disk Drive 0x81, BIOS: Extensions Present Interrupt 13 bios 1022/254/63 (max cyl/hd values) Interrupt 13 ext 01023/255/63 (number of cyl/hd) 17938985 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 06 Fat16 2 X 002249100 007181055 0140/000/01 0586/254/63 05 extended 3 S 000000063 000208782 0140/001/01 0152/254/63 83 Linux 4 x 000208845 000144585 0153/000/01 0161/254/63 05 extended 5 S 000000063 000144522 0153/001/01 0161/254/63 06 Fat16 6 x 004450005 000192780 0417/000/01 0428/254/63 05 extended 7 S 000000063 000192717 0417/001/01 0428/254/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 009430155 006152895 0587/000/01 0969/254/63 83 Linux 10 P 017510850 000417690 1023/000/01 1023/254/63 82 Linux swap Destination disk Drive 0x82, BIOS: Extensions Present Interrupt 13 bios 1022/254/63 (max cyl/hd values) Interrupt 13 ext 01023/255/63 (number of cyl/hd) 17938985 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001236942 0000/001/01 0076/254/63 06 Fat16 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 Safeback log: DI-146/SB_146B.TXT SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 11:00. 11:00:54 Menu selections:

```
Case DI-146 for SafeBack 2.18
                    Function:          Backup
                    Direct access:     No
                    Use XBIOS:         Yes
                    Adjust partitions: No
                    Backfill on restore:  No
          11:01:33  Backup file X:\IMG.001 created.
                    Backup file comment record:
                      DI-146
          11:01:40  Backing up drive D:
                    to X:\IMG.001 on D
                    SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 10:30.
          10:30:27  Menu selections:
                    Function:          Backup
                    Direct access:     No
                    Use XBIOS:         Auto
                    Adjust partitions: No
                    Backfill on restore:  No
          10:31:29  Backup file X:\IMG.001 created.
                    Backup file comment record:
                      DI-146
          10:31:35  Backing up drive D:
                    to X:\IMG.001 on Dec 10, 2001 10:31
          10:31:37  Local SafeBack is running on DOS 7.10
                    Source drive D:
                      Capacity........604 MB
                      Cylinders.......76
                      Heads...........255
          10:41:20  Backup file CRC: a350e79a.
          10:41:20  Backup of drive D: completed on Dec 10, 2001 10:41.
                    SafeBack execution ended on Dec 10, 2001 10:41.
          Safeback log: DI-146/SB_146R.TXT
                    SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 10:42.
          10:43:06  Menu selections:
                    Function:          Restore
                    Direct access:     No
                    Use XBIOS:         Auto
                    Adjust partitions: No
                    Backfill on restore:  No
          10:43:26  Backup file volume 1 requested.
          10:43:30  Backup file created on Dec 10, 2001 10:31
                    by Gary Fisher Natl Institute of Standards & Technology
          Software Diagnostics & Con
                    Backup file comment record:
                      DI-146
          10:43:35  Backup file X:\IMG.001 opened for access.
          10:43:55  Partition/Boot information saved to A:\PT.SPS.
          10:43:56  Restore of drive D: from X:\IMG.001
                    to drive E: started on Dec 10, 2001 10:43
          10:43:56  Partition fixup has been disabled.
          10:43:56  Local SafeBack is running on DOS 7.10
                    Source drive D:
                      Capacity........604 MB
                      Cylinders.......76
                      Heads...........255
                    Destination drive E:
                      Capacity........604 MB
                      Cylinders.......76
                      Heads...........255
          10:48:22  The whole-file CRC verifies:  a350e79a
          10:49:16  Restore of drive D: to drive E: completed on Dec 10, 2001 10:49
          10:49:27  Menu selections:
                    Function:          Restore
                    Direct access:     No
                    Use XBIOS:         Auto
                    Adjust partitions: No
                    Backfill on restore:  No
                    SafeBack execution ended on Dec 10, 2001 10:49.
          = = = = Measurement Logs = = = =
          Sectors Compared 1236942
          Sectors Differ 0
```

Case DI-146 for SafeBack 2.18	
	Diffs range: Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged src compares equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-147 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk and the source contains a FAT32 partition where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Fri Dec 14 11:12:19 2001
PC:	JudgeDee
Disks:	Source: DOS Drive 81 Physical Label EC Destination: DOS Drive 82 Physical Label E2 Image media: DOS Drive 80 Physical Label A7 EC is a SEAGATE ST39204LC with 17921835 sectors E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32 Disk: EC Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Dec 13 13:29:12 2001 cmd: Z:\ss\DISKWIPE.EXE EC JudgeDee 80 EC /src /new_log X:\pm\pqmagic /cmd=X:\pm\f32-src.txt Load Operating System to Source disk cmd: Z:\ss\DISKHASH.EXE EC JudgeDee 80 /before /new_log Disk hash = 2EB2013AAAA6079C0360E4B87E6F44CDC2072564
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-147 JudgeDee 81 E2 /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D32X-BS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001140552 0000/001/01 0070/254/63 0B Fat32
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-147 JudgeDee 81 /all /new_log /comment JRL(E2) Z:\ss\PARTAB.EXE DI-147 JudgeDee 82 /all /new_log /comment JRL(E2) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-147 JudgeDee 81 EC 82 E2 /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-147 JudgeDee 81 /comment JRL(EC) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-147
Log File Highlights:	Source disk Drive 0x81, BIOS: Extensions Present Interrupt 13 bios 1022/254/63 (max cyl/hd values) Interrupt 13 ext 01023/255/63 (number of cyl/hd) 17921835 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 0B Fat32 2 X 001429785 015872220 0089/000/01 1023/254/63 0F extended 3 S 000000063 000208782 0089/001/01 0101/254/63 83 Linux 4 x 000208845 000144585 0102/000/01 0110/254/63 05 extended 5 S 000000063 000144522 0102/001/01 0110/254/63 0B Fat32 6 x 000771120 000192780 0137/000/01 0148/254/63 05 extended 7 S 000000063 000192717 0137/001/01 0148/254/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 017302005 000064260 1023/000/01 1023/254/63 83 Linux 10 P 017494785 000417690 1023/000/01 1023/254/63 82 Linux swap

```
Case DI-147 for SafeBack 2.18
            Destination disk Drive 0x82, BIOS: Extensions Present
            Interrupt 13  bios  1022/254/63 (max cyl/hd values)
            Interrupt 13  ext   01023/255/63 (number of cyl/hd)
            17938985 total number of sectors reported via interrupt 13 from the BIOS
             N   Start LBA Length    Start C/H/S End C/H/S   boot Partition type
             1 P 000000063 001140552 0000/001/01 0070/254/63      0B Fat32
             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
            Safeback log: DI-147/SB_147B.TXT
                    SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 11:25.
            11:25:28  Menu selections:
                         Function:           Backup
                         Direct access:      No
                         Use XBIOS:          Yes
                         Adjust partitions:  No
                         Backfill on restore:  No
            11:26:02  Backup file F:\IMG.001 created.
                      Backup file comment record:
                         DI-147
            11:26:09  Backing up drive D:
                         to F:\IMG.001 on Dec 14, 2001 11:26
            11:26:10  Local SafeBack is running on DOS 7.10
                      Source drive D:
                         Capacity........604 MB
                         Cylinders.......76
                         Heads..........255
            11:27:58  Backup file CRC: 91cc2ab0.
            11:27:58  Backup of drive D: completed on Dec 14, 2001 11:27.
                      SafeBack execution ended on Dec 14, 2001 11:28.
            Safeback log: DI-147/SB_147R.TXT
                    SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 11:28.
            11:28:50  Menu selections:
                         Function:           Restore
                         Direct access:      No
                         Use XBIOS:          Yes
                         Adjust partitions:  No
                         Backfill on restore:  No
            11:29:04  Backup file created on Dec 14, 2001 11:26
                       by Gary Fisher Natl Institute of Standards & Technology
            Software Diagnostics & Con
                      Backup file comment record:
                         DI-147
            11:29:06  Backup file F:\IMG.001 opened for access.
            11:29:23  The destination drive capacity is smaller than that of the
                      original source drive.
            11:29:31  Partition/Boot information saved to A:\PT.SPS.
            11:29:32  Restore of drive D: from F:\IMG.001
                      to drive E: started on Dec 14, 2001 11:29
            11:29:32  Partition fixup has been disabled.
            11:29:32  Local SafeBack is running on DOS 7.10
                      Source drive D:
                         Capacity........604 MB
                         Cylinders.......76
                         Heads..........255
                      Destination drive E:
                         Capacity.......557 MB
                         Cylinders.......70
                         Heads..........255
            11:31:10  Restore of drive D: to drive E: completed on Dec 14, 2001 11:31
            11:32:47  Menu selections:
                         Function:           Restore
                         Direct access:      No
                         Use XBIOS:          Yes
                         Adjust partitions:  No
                         Backfill on restore:  No
                      SafeBack execution ended on Dec 14, 2001 11:32.
            = = = = Measurement Logs = = = =
            Sectors Compared 1140552
            Sectors Differ 1
```

Case DI-147 for SafeBack 2.18	
	Diffs range: 1 Source (1236942) has 96390 more sectors than destination (1140552) Hash after test: 2EB2013AAAA6079C0360E4B87E6F44CDC2072564
Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	FAT32 anomaly
Analysis:	Expected results not achieved

Case DI-148 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-SCSI destination disk and the source contains a FAT16 partition where the source disk is larger than the destination Create the image on a removable medium.
Tester Name:	JRL
Test Date:	Mon Dec 10 14:02:51 2001
PC:	Cadfael
Disks:	Source: DOS Drive 81 Physical Label E3 Destination: DOS Drive 82 Physical Label EB Image media: DOS Drive 80 Physical Label Jaz E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors EB is a SEAGATE ST39204LC with 17921835 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-148 Cadfael 81 EB /noask /dst /new_log /comment JRL X:\PM\PQMAGIC /cmd=X:\PM\D16X-BS.txt N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001128897 0000/001/01 0279/063/63 06 Fat16
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-148 Cadfael 81 /all /new_log /comment JRL(EB) Z:\ss\PARTAB.EXE DI-148 Cadfael 82 /all /new_log /comment JRL(EB) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\PARTCMP.EXE DI-148 Cadfael 81 E3 82 EB /new_log /comment JRL /select 1 1 Z:\ss\DISKHASH.EXE DI-148 Rumpole 81 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-148
Log File Highlights:	Source disk Drive 0x81, BIOS: Extensions Present Interrupt 13 bios 1022/254/63 (max cyl/hd values) Interrupt 13 ext 01023/255/63 (number of cyl/hd) 17938985 total number of sectors reported via interrupt 13 from the BIOS N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 001236942 0000/001/01 0076/254/63 Boot 06 Fat16 2 X 002249100 007181055 0140/000/01 0586/254/63 05 extended 3 S 000000063 000208782 0140/001/01 0152/254/63 83 Linux 4 x 000208845 000144585 0153/000/01 0161/254/63 05 extended 5 S 000000063 000144522 0153/001/01 0161/254/63 06 Fat16 6 x 004450005 000192780 0417/000/01 0428/254/63 05 extended 7 S 000000063 000192717 0417/001/01 0428/254/63 16 other 8 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 9 P 009430155 006152895 0587/000/01 0969/254/63 83 Linux 10 P 017510850 000417690 1023/000/01 1023/254/63 82 Linux swap

```
Case DI-148 for SafeBack 2.18
              Destination disk Drive 0x82, BIOS: Extensions Present
              Interrupt 13  bios  1022/063/63 (max cyl/hd values)
              Interrupt 13  ext   01023/064/63 (number of cyl/hd)
              17921835 total number of sectors reported via interrupt 13 from the BIOS
               N   Start LBA Length    Start C/H/S End C/H/S   boot Partition type
               1 P 000000063 001128897 0000/001/01 0279/063/63      06 Fat16
               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
              Safeback log: DI-148/SB_148B.TXT
                      SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 14:15.
              14:15:22  Menu selections:
                          Function:           Backup
                          Direct access:      No
                          Use XBIOS:          Auto
                          Adjust partitions:  No
                          Backfill on restore: No
              14:16:14  Backup file X:\IMG.001 created.
                          Backup file comment record:
                           DI-148
              14:16:20  Backing up drive D:
                          to X:\IMG.001 on Dec 10, 2001 14:16
              14:16:22  Local SafeBack is running on DOS 7.10
                          Source drive D:
                           Capacity........604 MB
                           Cylinders.......76
                           Heads...........255
              14:26:11  Backup file CRC: 8e7da8f3.
              14:26:12  Backup of drive D: completed on Dec 10, 2001 14:26.
                          SafeBack execution ended on Dec 10, 2001 14:28.
              Safeback log: DI-148/SB_148R.TXT
                      SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 14:29.
              14:30:14  Menu selections:
                          Function:           Restore
                          Direct access:      No
                          Use XBIOS:          Yes
                          Adjust partitions:  No
                          Backfill on restore: No
              14:30:23  Backup file volume 1 requested.
              14:30:27  Backup file created on Dec 10, 2001 14:16
                          by Gary Fisher Natl Institute of Standards & Technology
              Software Diagnostics & Con
                          Backup file comment record:
                           DI-148
              14:30:30  Backup file X:\IMG.001 opened for access.
              14:30:47  The destination drive capacity is smaller than that of the
                          original source drive.
              14:30:55  Partition/Boot information saved to A:\PT.SPS.
              14:30:56  Restore of drive D: from X:\IMG.001
                          to drive E: started on Dec 10, 2001 14:30
              14:30:56  Partition fixup has been disabled.
              14:30:56  Local SafeBack is running on DOS 7.10
                          Source drive D:
                           Capacity........604 MB
                           Cylinders.......76
                           Heads...........255
                          Destination drive E:
                           Capacity........551 MB
                           Cylinders.......279
                           Heads...........64
              14:35:07  Restore of drive D: to drive E: completed on Dec 10, 2001 14:35
              14:36:21  Menu selections:
                          Function:           Restore
                          Direct access:      No
                          Use XBIOS:          Yes
                          Adjust partitions:  No
                          Backfill on restore: No
                          SafeBack execution ended on Dec 10, 2001 14:36.
              = = = = Measurement Logs = = = =
              Sectors Compared 1128897
```

Case DI-148 for SafeBack 2.18	
	Sectors Differ 0 Diffs range: Source (1236942) has 108045 more sectors than destination (1128897) Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-149 for SafeBack 2.18	
Case Summary:	Create an image from a direct access IDE source disk to a direct access IDE destination disk where the source disk is smaller than the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Tue Dec 11 10:37:49 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label BB Image media: DOS Drive 82 Physical Label E1 B8 is a WDC AC21600H with 3173184 sectors BB is a QUANTUM FIREBALL ST3.2A with 6306048 sectors E1 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-149 Rumpole 81 BB /noask /dst /new_log /comment JRL
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-149 Host D:\IMG.001 6747 AE /comment None Change byte 6747 of file D:\IMG.001 from 0xFFB8 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-149 Rumpole 80 /all /new_log /comment JRL(BB) Z:\ss\PARTAB.EXE DI-149 Rumpole 81 /all /new_log /comment JRL(BB) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-149 Rumpole 80 B8 81 BB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-149 Rumpole 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-149

Log File Highlights:	Safeback log: DI-149/SB_149B.TXT
	      SafeBack 2.18 13Feb01 execution started on Dec 11, 2001 11:12.
	      The tape drive was not used.
	11:13:28 Menu selections:
	      Function: Backup
	      Direct access: Yes
	      Use XBIOS: Auto
	      Adjust partitions: No
	      Backfill on restore: No
	11:14:46 Backup file D:\IMG.001 created.
	      Backup file comment record:
	        DI-149
	11:14:52 Backing up drive 0:
	      to D:\IMG.001 on Dec 11, 2001 11:14
	11:14:54 Local SafeBack is running on DOS 7.10

Case DI-149 for SafeBack 2.18	
	Source drive 0:
	Capacity........1549 MB
	Cylinders.......3148
	Heads..........16
	Model: WDC AC21600H
	Serial Number: WD-WM3363932134
	Firmware version: 24.09P07
	IDE controller port with LBA direct drive access used.
	11:14:54 Partition table for drive 0:
	11:23:47 Backup file CRC: 2de48036.
	11:23:47 Backup of drive 0: completed on Dec 11, 2001 11:23.
	SafeBack execution ended on Dec 11, 2001 12:22.
	Safeback log: DI-149/SB_149R.TXT
	SafeBack 2.18 13Feb01 execution started on Dec 11, 2001 12:25.
	The tape drive was not used.
	12:26:15 Menu selections:
	Function: Restore
	Direct access: Yes
	Use XBIOS: Auto
	Adjust partitions: No
	Backfill on restore: No
	12:26:25 Backup file created on Dec 11, 2001 11:14
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-149
	12:26:28 Backup file D:\IMG.001 opened for access.
	12:26:50 Restore of drive 0: from D:\IMG.001
	to drive 1: started on Dec 11, 2001 12:26
	12:26:50 Partition fixup has been disabled.
	12:26:50 Local SafeBack is running on DOS 7.10
	Source drive 0:
	Capacity........1549 MB
	Cylinders.......3148
	Heads..........16
	IDE/ESDI controller port direct drive access used.
	Destination drive 1:
	Capacity........3079 MB
	Cylinders.......6256
	Heads..........16
	Model: QUANTUM FIREBALL ST3.2A
	Serial Number: 853770808172
	Firmware version: A0F.0800
	IDE controller port with LBA direct drive access used.
	12:26:50 IMG.001, record 0 has a CRC error. 0bc1 was expected, but 47bc read.
	12:26:55 Backup file CRC error ignored by recovery at sector 0.
	12:26:57 Data starting at sector 0 and the next 119 sectors is
	questionable due to CRC errors.
	12:35:33 CRC mismatch: Calculated: 37014d2e, Read: 2de48036
	12:46:55 Restore of drive 0: to drive 1: completed on Dec 11, 2001 12:46
	12:47:05 Menu selections:
	Function: Restore
	Direct access: Yes
	Use XBIOS: Auto
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Dec 11, 2001 12:47.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 1
	Diffs range 12
	Source (3173184) has 3132864 fewer sectors than destination (6306048)
	Zero fill: 3132864
	Src Byte fill (B8): 0
	Dst Byte fill (BB): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Expected	Source disk is unchanged

Case DI-149 for SafeBack 2.18	
Results:	image verification error
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-150 for SafeBack 2.18	
Case Summary:	Create an image from a direct access IDE source disk to a direct access IDE destination disk where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Mon Dec 10 14:01:09 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label BB Image media: DOS Drive 82 Physical Label CC B8 is a WDC AC21600H with 3173184 sectors BB is a QUANTUM FIREBALL ST3.2A with 6306048 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-150 Rumpole 81 BB /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-150 Rumpole 80 /all /new_log /comment JRL(BB) Z:\ss\PARTAB.EXE DI-150 Rumpole 81 /all /new_log /comment JRL(BB) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-150 Rumpole 80 B8 81 BB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-150 Rumpole 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-150

Log File Highlights:	Safeback log: DI-150/SB_150B.TXT
	      SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 14:26.
	      The tape drive was not used.
	14:26:11 Menu selections:
	      Function: Backup
	      Direct access: Yes
	      Use XBIOS: Auto
	      Adjust partitions: No
	      Backfill on restore: No
	14:26:51 Backup file D:\IMG.001 created.
	      Backup file comment record:
	      DI-150
	14:26:56 Backing up drive 0:
	      to D:\IMG.001 on Dec 10, 2001 14:26
	14:26:57 Local SafeBack is running on DOS 7.10
	      Source drive 0:
	      Capacity........1549 MB
	      Cylinders.......3148
	      Heads...........16
	      Model: WDC AC21600H
	      Serial Number: WD-WM3363932134
	      Firmware version: 24.09P07
	      IDE controller port with LBA direct drive access used.

```
Case DI-150 for SafeBack 2.18
              14:26:57  Partition table for drive 0:
              14:35:54  Backup file CRC: 479afba8.
              14:35:54  Backup of drive 0: completed on Dec 10, 2001 14:35.
                        SafeBack execution ended on Dec 10, 2001 14:37.
              Safeback log: DI-150/SB_150R.TXT
                        SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 14:23.
                        The tape drive was not used.
              14:23:28  Menu selections:
                          Function:            Restore
                          Direct access:       Yes
                          Use XBIOS:           Auto
                          Adjust partitions:   No
                          Backfill on restore: No
              14:23:44  Backup file created on Dec 10, 2001 14:13
                         by Gary Fisher Natl Institute of Standards & Technology
              Software Diagnostics & Con
                          Backup file comment record:
                           DI-150
              14:23:46  Backup file D:\IMG.001 opened for access.
              14:24:06  Can't Restore a logical drive (C:) to a physical drive (1:)
              14:24:34  Restore operation terminated by error or user.
              14:24:36  Menu selections:
                          Function:            Restore
                          Direct access:       Yes
                          Use XBIOS:           Auto
                          Adjust partitions:   No
                          Backfill on restore: No
                        SafeBack execution ended on Dec 10, 2001 14:24.
                        SafeBack 2.18 13Feb01 execution started on Dec 10, 2001 14:39.
                        The tape drive was not used.
              14:39:29  Menu selections:
                          Function:            Restore
                          Direct access:       Yes
                          Use XBIOS:           Auto
                          Adjust partitions:   No
                          Backfill on restore: No
              14:39:43  Backup file created on Dec 10, 2001 14:26
                         by Gary Fisher Natl Institute of Standards & Technology
              Software Diagnostics & Con
                          Backup file comment record:
                           DI-150
              14:39:46  Backup file D:\IMG.001 opened for access.
              14:40:16  Restore of drive 0: from D:\IMG.001
                        to drive 1: started on Dec 10, 2001 14:40
              14:40:16  Partition fixup has been disabled.
              14:40:16  Local SafeBack is running on DOS 7.10
                        Source drive 0:
                          Capacity........1549 MB
                          Cylinders.......3148
                          Heads...........16
                          IDE/ESDI controller port direct drive access used.
                        Destination drive 1:
                          Capacity........3079 MB
                          Cylinders.......6256
                          Heads...........16
                          Model: QUANTUM FIREBALL ST3.2A
                          Serial Number: 853770808172
                          Firmware version: A0F.0800
                          IDE controller port with LBA direct drive access used.
              14:48:53  The whole-file CRC verifies:  479afba8
              14:55:01  Restore of drive 0: to drive 1: completed on Dec 10, 2001 14:55
              14:55:11  Menu selections:
                          Function:            Restore
                          Direct access:       Yes
                          Use XBIOS:           Auto
                          Adjust partitions:   No
                          Backfill on restore: No
                        SafeBack execution ended on Dec 10, 2001 14:55.
              = = = = Measurement Logs = = = =
              Sectors Compared 3173184
```

Case DI-150 for SafeBack 2.18	
	Sectors Differ 0 Diffs range Source (3173184) has 3132864 fewer sectors than destination (6306048) Zero fill: 3132864 Src Byte fill (B8): 0 Dst Byte fill (BB): 0 Other fill: 0 Other no fill: 0 Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-151 for SafeBack 2.18	
Case Summary:	Create an image from a direct access IDE source disk to a direct access IDE destination disk where the source disk is the same size as the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Fri Dec 14 13:13:45 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label CC B8 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-151 Rumpole 81 B7 /noask /dst /new_log /comment JRL
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-151 Host D:\IMG.001 3579 AE /comment None Change byte 3579 of file D:\IMG.001 from 0xFFB8 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-151 Rumpole 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-151 Rumpole 81 /all /new_log /comment JRL(B7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-151 Rumpole 80 B8 81 B7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-151 Rumpole 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-151

Log File
Highlights:
	Safeback log: DI-151/SB_151B.TXT
	        SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 13:22.
	        The tape drive was not used.
	13:22:54 Menu selections:
	            Function: Backup
	            Direct access: Yes
	            Use XBIOS: Auto
	            Adjust partitions: No
	            Backfill on restore: No
	13:23:34 Backup file E:\IMG.001 created.
	        Backup file comment record:

Case DI-151 for SafeBack 2.18	
	DI-151
	13:23:40 Backing up drive 0:
	to E:\IMG.001 on Dec 14, 2001 13:23
	13:23:43 Local SafeBack is running on DOS 7.10
	Source drive 0:
	Capacity........1549 MB
	Cylinders.......3148
	Heads...........16
	Model: WDC AC21600H
	Serial Number: WD-WM3363932134
	Firmware version: 24.09P07
	IDE controller port with LBA direct drive access used.
	13:23:43 Partition table for drive 0:
	13:32:41 Backup file CRC: 24d2ac4f.
	13:32:41 Backup of drive 0: completed on Dec 14, 2001 13:32.
	SafeBack execution ended on Dec 14, 2001 14:40.
	Safeback log: DI-151/SB_151R.TXT
	SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 15:38.
	The tape drive was not used.
	15:38:55 Menu selections:
	Function: Restore
	Direct access: Yes
	Use XBIOS: Auto
	Adjust partitions: No
	Backfill on restore: No
	15:39:07 Backup file created on Dec 14, 2001 13:23
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-151
	15:39:12 Backup file D:\IMG.001 opened for access.
	15:39:41 Restore of drive 0: from D:\IMG.001
	to drive 1: started on Dec 14, 2001 15:39
	15:39:41 Partition fixup has been disabled.
	15:39:41 Local SafeBack is running on DOS 7.10
	Source drive 0:
	Capacity........1549 MB
	Cylinders.......3148
	Heads...........16
	IDE/ESDI controller port direct drive access used.
	Destination drive 1:
	Capacity........1549 MB
	Cylinders.......3148
	Heads...........16
	Model: WDC AC21600H
	Serial Number: WD-WM3362453003
	Firmware version: 24.09P07
	IDE controller port with LBA direct drive access used.
	15:39:41 IMG.001, record 0 has a CRC error. 4020 was expected, but 47bc read.
	15:39:48 Backup file CRC error ignored by recovery at sector 0.
	15:39:51 Data starting at sector 0 and the next 119 sectors is
	questionable due to CRC errors.
	15:49:18 CRC mismatch: Calculated: e9ad5545, Read: 24d2ac4f
	15:49:22 Restore of drive 0: to drive 1: completed on Dec 14, 2001 15:49
	15:49:29 Menu selections:
	Function: Restore
	Direct access: Yes
	Use XBIOS: Auto
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Dec 14, 2001 15:49.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 1
	Diffs range 6
	Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Expected Results:	Source disk is unchanged image verification error
Actual	No anomalies

Case DI-151 for SafeBack 2.18	
Results:	
Analysis:	Expected results achieved

Case DI-152 for SafeBack 2.18	
Case Summary:	Create an image from a direct access IDE source disk to a direct access disk where the source disk is the same size as the destination
Tester Name:	JRL
Test Date:	Tue Dec 04 09:50:34 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8 Destination: DOS Drive 81 Physical Label B7 Image media: DOS Drive 82 Physical Label CC B8 is a WDC AC21600H with 3173184 sectors B7 is a WDC AC21600H with 3173184 sectors CC is a SEAGATE ST336705LC with 71687370 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16 Disk: B8 Host: JudgeDee Operator: JRL OS: Windows/Me Options: Typical Date: Thu Oct 18 13:47:31 2001 cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log X:\pm\pqmagic /cmd=X:\pm\nex-src.txt Load Operating System to Source disk cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-152 Rumpole 81 B7 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-152 Rumpole 80 /all /new_log /comment JRL(B7) Z:\ss\PARTAB.EXE DI-152 Rumpole 81 /all /new_log /comment JRL(B7) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-152 Rumpole 80 B8 81 B7 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-152 Rumpole 80 /comment JRL(B8) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-152

Log File
Highlights:
	Safeback log: DI-152/SB_152B.TXT
	      SafeBack 2.18 13Feb01 execution started on Dec 4, 2001 10:03.
	      The tape drive was not used.
	10:03:16 Menu selections:
	      Function: Backup
	      Direct access: Yes
	      Use XBIOS: Auto
	      Adjust partitions: No
	      Backfill on restore: No
	10:03:56 Backup file D:\IMG.001 created.
	      Backup file comment record:
	      DI-152
	10:04:05 Backing up drive 0:
	      to D:\IMG.001 on Dec 4, 2001 10:04
	10:04:07 Local SafeBack is running on DOS 7.10
	      Source drive 0:
	      Capacity........1549 MB
	      Cylinders.......3148
	      Heads...........16
	      Model: WDC AC21600H
	      Serial Number: WD-WM3363932134
	      Firmware version: 24.09P07
	      IDE controller port with LBA direct drive access used.
	10:04:07 Partition table for drive 0:
	10:13:04 Backup file CRC: 5c9fb4c1.
	10:13:04 Backup of drive 0: completed on Dec 4, 2001 10:13.

Case DI-152 for SafeBack 2.18	

	SafeBack execution ended on Dec 4, 2001 10:15.
	Safeback log: DI-152/SB_152R.TXT
	SafeBack 2.18 13Feb01 execution started on Dec 4, 2001 10:16.
	The tape drive was not used.
	10:17:08 Menu selections:
	    Function: Restore
	    Direct access: Yes
	    Use XBIOS: Auto
	    Adjust partitions: No
	    Backfill on restore: No
	10:17:18 Backup file created on Dec 4, 2001 10:04
	    by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	    Backup file comment record:
	      DI-152
	10:17:20 Backup file D:\IMG.001 opened for access.
	10:17:38 Restore of drive 0: from D:\IMG.001
	    to drive 1: started on Dec 4, 2001 10:17
	10:17:38 Partition fixup has been disabled.
	10:17:38 Local SafeBack is running on DOS 7.10
	    Source drive 0:
	      Capacity........1549 MB
	      Cylinders.......3148
	      Heads...........16
	      IDE/ESDI controller port direct drive access used.
	    Destination drive 1:
	      Capacity........1549 MB
	      Cylinders.......3148
	      Heads...........16
	      Model: WDC AC21600H
	      Serial Number: WD-WM3362453003
	      Firmware version: 24.09P07
	      IDE controller port with LBA direct drive access used.
	10:27:02 The whole-file CRC verifies: 5c9fb4c1
	10:27:02 Restore of drive 0: to drive 1: completed on Dec 4, 2001 10:27
	10:27:13 Menu selections:
	    Function: Restore
	    Direct access: Yes
	    Use XBIOS: Auto
	    Adjust partitions: No
	    Backfill on restore: No
	    SafeBack execution ended on Dec 4, 2001 10:27.
	= = = = Measurement Logs = = = =
	Sectors Compared 3173184
	Sectors Differ 0
	Diffs range
	Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2

Expected Results:	Source disk is unchanged src compares equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-153 for SafeBack 2.18	
Case Summary:	Create an image from a direct access IDE source disk to a direct access IDE destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Thu Dec 13 14:37:09 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label F6 Destination: DOS Drive 81 Physical Label A5 Image media: DOS Drive 82 Physical Label AB F6 is an IBM-DTLA-307020 with 40188960 sectors A5 is a WDC WD200BB-00AUA1 with 39102336 sectors AB is a Maxtor53073H4 with 60030432 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk	Windows 2000 with NTFS & Fat32

Case DI-153 for SafeBack 2.18	
setup:	Disk: F6 Host: Wimsey Operator: JRL OS: Windows 2000 Date: Sat Jul 21 15:53:12 2001 DISKWIPE.EXE F6_SRC Wimsey 80 F6 /src /new_log /noask /comment Windows 2000/NT source X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk DISKHASH.EXE LX-27 Morse 80 /before Disk hash = 8034683D5D55BA51409AC7B5CB0845CA2CF6B235
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-153 Cadfael 81 A5 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-153 Cadfael 80 /all /new_log /comment JRL(A5) Z:\ss\PARTAB.EXE DI-153 Cadfael 81 /all /new_log /comment JRL(A5) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-153 Cadfael 80 F6 81 A5 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-153 Cadfael 80 /comment JRL(F6) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-153

Log File Highlights:	Safeback log: DI-153/SB_153B.TXT
	     SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 07:42.
	07:42:42 Menu selections:
	     Function: Backup
	     Direct access: Yes
	     Use XBIOS: Auto
	     Adjust partitions: No
	     Backfill on restore: No
	07:49:52 Menu selections:
	     Function: Backup
	     Direct access: No
	     Use XBIOS: Auto
	     Adjust partitions: No
	     Backfill on restore: No
	07:50:09 Menu selections:
	     Function: Backup
	     Direct access: Yes
	     Use XBIOS: Auto
	     Adjust partitions: No
	     Backfill on restore: No
	07:51:06 Menu selections:
	     Function: Backup
	     Direct access: No
	     Use XBIOS: Auto
	     Adjust partitions: No
	     Backfill on restore: No
	07:51:20 Menu selections:
	     Function: Backup
	     Direct access: Yes
	     Use XBIOS: Auto
	     Adjust partitions: No
	     Backfill on restore: No
	07:51:42 Backup file E:\IMG.001 created.
	     Backup file comment record:
	     DI-153
	07:51:51 Backing up drive 1:
	     to E:\IMG.001 on Dec 14, 2001 07:51
	07:51:51 Local SafeBack is running on DOS 7.10
	     Source drive 1:
	      Capacity........19624 MB
	      Cylinders.......39870
	      Heads...........16
	      Model: IBM-DTLA-307020
	      Serial Number: YHDYHLD2691
	      Firmware version: TX3GA50C
	      IDE controller port with LBA direct drive access used.

Case DI-153 for SafeBack 2.18	

	07:51:51 Partition table for drive 1:
	08:04:52 Backup file E:\IMG.002 created.
	08:17:54 Backup file E:\IMG.003 created.
	08:30:59 Backup file E:\IMG.004 created.
	08:44:03 Backup file E:\IMG.005 created.
	08:57:10 Backup file E:\IMG.006 created.
	09:10:19 Backup file E:\IMG.007 created.
	09:23:29 Backup file E:\IMG.008 created.
	09:36:41 Backup file E:\IMG.009 created.
	09:49:54 Backup file E:\IMG.010 created.
	09:57:52 Backup file CRC: ecf21094.
	09:57:53 Backup of drive 1: completed on Dec 14, 2001 09:57.
	      SafeBack execution ended on Dec 14, 2001 10:04.
	Safeback log: DI-153/SB_153R.TXT
	      SafeBack 2.18 13Feb01 execution started on Dec 14, 2001 10:14.
	10:14:53 Menu selections:
	      Function: Restore
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	10:15:23 Backup file created on Dec 14, 2001 07:51
	      by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	      Backup file comment record:
	       DI-153
	10:15:28 Backup file D:\IMG.001 opened for access.
	10:15:47 The destination drive capacity is smaller than that of the
	      original source drive.
	10:15:58 Restore of drive 1: from D:\IMG.001
	      to drive 1: started on Dec 14, 2001 10:15
	10:15:58 Partition fixup has been disabled.
	10:15:58 Local SafeBack is running on DOS 7.10
	      Source drive 1:
	       Capacity........19624 MB
	       Cylinders.......39870
	       Heads...........16
	       IDE/ESDI controller port direct drive access used.
	      Destination drive 1:
	       Capacity........19093 MB
	       Cylinders.......2434
	       Heads...........255
	10:24:50 Backup file D:\IMG.002 opened for access.
	10:33:40 Backup file D:\IMG.003 opened for access.
	10:42:29 Backup file D:\IMG.004 opened for access.
	10:51:19 Backup file D:\IMG.005 opened for access.
	11:00:11 Backup file D:\IMG.006 opened for access.
	11:09:01 Backup file D:\IMG.007 opened for access.
	11:17:50 Backup file D:\IMG.008 opened for access.
	11:26:40 Backup file D:\IMG.009 opened for access.
	11:35:29 Backup file D:\IMG.010 opened for access.
	11:38:31 Restore of drive 1: to drive 1: completed on Dec 14, 2001 11:38
	11:39:28 Menu selections:
	      Function: Restore
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	      SafeBack execution ended on Dec 14, 2001 11:39.
	= = = = Measurement Logs = = = =
	Sectors Compared 39102336
	Sectors Differ 0
	Diffs range
	Source (40188960) has 1086624 more sectors than destination (39102336)
	Hash after test: 8034683D5D55BA51409AC7B5CB0845CA2CF6B235

Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	No anomalies

Case DI-153 for SafeBack 2.18	
Analysis:	Expected results achieved

Case DI-154 for SafeBack 2.18	
Case Summary:	Create an image from an ASPI SCSI source disk to an ASPI SCSI destination disk where the source disk is smaller than the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Mon Dec 03 09:57:19 2001
PC:	Cadfael
Disks:	Source: DOS Drive 81 Physical Label E4 Destination: DOS Drive 82 Physical Label E6 Image media: DOS Drive 80 Physical Label A8 E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E6 is a SEAGATE ST318404LC with 35843670 sectors A8 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32 Disk: E4 Host: JudgeDee Operator: JRL OS: Windows 2000/NT Date: Sat Jul 21 16:58:28 2001 DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000 source disk X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-154 Cadfael 81 E6 /noask /dst /new_log /comment JRL
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-154 Host E:\IMG.001 6821 AE /comment None Change byte 6821 of file E:\IMG.001 from 0xFFE4 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-154 Cadfael 81 /all /new_log /comment JRL(E6) Z:\ss\PARTAB.EXE DI-154 Cadfael 82 /all /new_log /comment JRL(E6) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-154 Cadfael 81 E4 82 E6 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-154 Cadfael 81 /comment JRL(E4) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-154

Log File
Highlights:
	Safeback log: DI-154/SB_154B.TXT
	      SafeBack 2.18 13Feb01 execution started on Dec 3, 2001 10:11.
	10:11:38 Menu selections:
	      Function: Backup
	      Direct access: Yes
	      Use XBIOS: Auto
	      Adjust partitions: No
	      Backfill on restore: No
	10:12:21 Backup file E:\IMG.001 created.
	      Backup file comment record:
	        DI-154
	10:12:30 Backing up drive 1:
	      to E:\IMG.001 on Dec 3, 2001 10:12
	10:12:31 Local SafeBack is running on DOS 7.10
	      Source drive 1:
	        Capacity........8759 MB
	        Cylinders.......17338
	        Heads...........3
	        Model: QUANTUM ATLAS10K2-TY092J
	        Serial Number: 16902814
	        Firmware version: DDD6
	        SCSI ASPI driver direct drive access used.
	10:12:31 Partition table for drive 1:
	10:18:41 Backup file E:\IMG.002 created.
	10:24:55 Backup file E:\IMG.003 created.

Case DI-154 for SafeBack 2.18	

	10:31:11 Backup file E:\IMG.004 created.
	10:37:24 Backup file E:\IMG.005 created.
	10:39:07 Backup file CRC: bcbf2826.
	10:39:07 Backup of drive 1: completed on Dec 3, 2001 10:39.
	        SafeBack execution ended on Dec 3, 2001 10:40.
	Safeback log: DI-154/SB_154R.TXT
	        SafeBack 2.18 13Feb01 execution started on Dec 3, 2001 10:46.
	10:46:36 Menu selections:
	        Function: Restore
	        Direct access: Yes
	        Use XBIOS: Auto
	        Adjust partitions: No
	        Backfill on restore: No
	10:46:51 Backup file created on Dec 3, 2001 10:12
	        by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	        Backup file comment record:
	         DI-154
	10:46:54 Backup file E:\IMG.001 opened for access.
	10:47:20 Restore of drive 1: from E:\IMG.001
	        to drive 2: started on Dec 3, 2001 10:47
	10:47:20 Partition fixup has been disabled.
	10:47:20 Local SafeBack is running on DOS 7.10
	        Source drive 1:
	         Capacity........8759 MB
	         Cylinders.......17338
	         Heads...........3
	         SCSI ASPI driver direct drive access used.
	        Destination drive 2:
	         Capacity........17502 MB
	         Cylinders.......14384
	         Heads...........6
	         Model: SEAGATE ST318404LC
	         Serial Number: 3BT1ZWXT
	         Firmware version: 0006
	         SCSI ASPI driver direct drive access used.
	10:47:20 IMG.001, record 0 has a CRC error. 122f was expected, but e753
	read.
	10:47:25 Backup file CRC error ignored by recovery at sector 0.
	10:47:28 Data starting at sector 0 and the next 119 sectors is
	        questionable due to CRC errors.
	10:54:01 Backup file E:\IMG.002 opened for access.
	11:00:39 Backup file E:\IMG.003 opened for access.
	11:07:27 Backup file E:\IMG.004 opened for access.
	11:14:14 Backup file E:\IMG.005 opened for access.
	11:16:01 CRC mismatch: Calculated: 7ad426b7, Read: bcbf2826
	11:28:21 Restore of drive 1: to drive 2: completed on Dec 3, 2001 11:28
	11:33:25 Menu selections:
	        Function: Restore
	        Direct access: Yes
	        Use XBIOS: Auto
	        Adjust partitions: No
	        Backfill on restore: No
	        SafeBack execution ended on Dec 3, 2001 11:33.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 1
	Diffs range 12
	Source (17938985) has 17904685 fewer sectors than destination (35843670)
	Zero fill: 17904685
	Src Byte fill (E4): 0
	Dst Byte fill (E6): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF

Expected Results:	Source disk is unchanged image verification error
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-155 for SafeBack 2.18	
Case Summary:	Create an image from an ASPI SCSI source disk to an ASPI SCSI destination disk where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Thu Nov 15 17:54:25 2001
PC:	Cadfael
Disks:	Source: DOS Drive 81 Physical Label E3 Destination: DOS Drive 82 Physical Label E6 Image media: DOS Drive 80 Physical Label A8 E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E6 is a SEAGATE ST318404LC with 35843670 sectors A8 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-155 Cadfael 81 E6 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-155 Cadfael 81 /all /new_log /comment JRL(E6) Z:\ss\PARTAB.EXE DI-155 Cadfael 82 /all /new_log /comment JRL(E6) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-155 Cadfael 81 E3 82 E6 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-155 cadfaele 81 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-155

Log File
Highlights:
	Safeback log: DI-155/SB_155B.TXT
	      SafeBack 2.18 13Feb01 execution started on Nov 15, 2001 18:25.
	18:25:52 Menu selections:
	         Function: Backup
	         Direct access: Yes
	         Use XBIOS: Auto
	         Adjust partitions: No
	         Backfill on restore: No
	18:26:36 Backup file E:\IMG.001 created.
	        Backup file comment record:
	         DI-155
	18:26:45 Backing up drive 1:
	        to E:\IMG.001 on Nov 15, 2001 18:26
	18:26:46 Local SafeBack is running on DOS 7.10
	        Source drive 1:
	         Capacity........8759 MB
	         Cylinders.......17338
	         Heads...........3
	         Model: QUANTUM ATLAS10K2-TY092J
	         Serial Number: 16902814
	         Firmware version: DDD6
	         SCSI ASPI driver direct drive access used.
	18:26:46 Partition table for drive 1:
	18:32:46 Backup file E:\IMG.002 created.
	18:38:48 Backup file E:\IMG.003 created.
	18:44:55 Backup file E:\IMG.004 created.
	18:51:02 Backup file E:\IMG.005 created.
	18:52:47 Backup file CRC: 921cbf7e.
	18:52:47 Backup of drive 1: completed on Nov 15, 2001 18:52.
	        SafeBack execution ended on Nov 15, 2001 18:52.

Case DI-155 for SafeBack 2.18	
	Safeback log: DI-155/SB_155R.TXT
	SafeBack 2.18 13Feb01 execution started on Nov 15, 2001 18:53.
	18:53:43 Menu selections:
	Function: Restore
	Direct access: Yes
	Use XBIOS: Auto
	Adjust partitions: No
	Backfill on restore: No
	18:54:04 Backup file created on Nov 15, 2001 18:26
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-155
	18:54:07 Backup file E:\IMG.001 opened for access.
	18:54:24 Restore of drive 1: from E:\IMG.001
	to drive 2: started on Nov 15, 2001 18:54
	18:54:24 Partition fixup has been disabled.
	18:54:24 Local SafeBack is running on DOS 7.10
	Source drive 1:
	Capacity........8759 MB
	Cylinders.......17338
	Heads...........3
	SCSI ASPI driver direct drive access used.
	Destination drive 2:
	Capacity........17502 MB
	Cylinders.......14384
	Heads...........6
	Model: SEAGATE ST318404LC
	Serial Number: 3BT1ZWXT
	Firmware version: 0006
	SCSI ASPI driver direct drive access used.
	19:00:39 Backup file E:\IMG.002 opened for access.
	19:06:56 Backup file E:\IMG.003 opened for access.
	19:13:16 Backup file E:\IMG.004 opened for access.
	19:19:42 Backup file E:\IMG.005 opened for access.
	19:21:33 The whole-file CRC verifies: 921cbf7e
	19:26:55 Restore of drive 1: to drive 2: completed on Nov 15, 2001 19:26
	19:27:29 Menu selections:
	Function: Restore
	Direct access: Yes
	Use XBIOS: Auto
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Nov 15, 2001 19:27.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 0
	Diffs range
	Source (17938985) has 17904685 fewer sectors than destination (35843670)
	Zero fill: 17904685
	Src Byte fill (E3): 0
	Dst Byte fill (E6): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-156 for SafeBack 2.18	
Case Summary:	Create an image from an ASPI SCSI source disk
	to an ASPI SCSI destination disk
	where the source disk is the same size as the destination
	Introduce an error on the image.
Tester Name:	JRL
Test Date:	Mon Dec 03 10:33:01 2001
PC:	Wimsey

Case DI-156 for SafeBack 2.18	
Disks:	Source: DOS Drive 81 Physical Label E3 Destination: DOS Drive 82 Physical Label E2 Image media: DOS Drive 80 Physical Label A7 E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-156 Wimsey 81 E2 /noask /dst /new_log /comment JRL
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-156 Host E:\IMG.001 5139 AE /comment None Change byte 5139 of file E:\IMG.001 from 0xFFE3 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-156 Wimsey 81 /all /new_log /comment JRL(E2) Z:\ss\PARTAB.EXE DI-156 Wimsey 82 /all /new_log /comment JRL(E2) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-156 Wimsey 81 E3 82 E2 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-156 Wimsey 81 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-156

Log File
Highlights:
	Safeback log: DI-156/SB_156B.TXT
	      SafeBack 2.18 13Feb01 execution started on Dec 3, 2001 10:49.
	10:49:58 Menu selections:
	      Function: Backup
	      Direct access: Yes
	      Use XBIOS: Auto
	      Adjust partitions: No
	      Backfill on restore: No
	10:50:25 Backup file E:\IMG.001 created.
	      Backup file comment record:
	      DI-156 ASPI
	10:50:40 Backing up drive 1:
	      to E:\IMG.001 on Dec 3, 2001 10:50
	10:50:41 Local SafeBack is running on DOS 7.10
	      Source drive 1:
	       Capacity........8759 MB
	       Cylinders.......17338
	       Heads...........3
	       Model: QUANTUM ATLAS10K2-TY092J
	       Serial Number: 16902814
	       Firmware version: DDD6
	       SCSI ASPI driver direct drive access used.
	10:50:41 Partition table for drive 1:
	10:56:52 Backup file E:\IMG.002 created.
	11:03:06 Backup file E:\IMG.003 created.
	11:09:17 Backup file E:\IMG.004 created.
	11:15:15 Backup file E:\IMG.005 created.
	11:16:59 Backup file CRC: 99be1833.
	11:16:59 Backup of drive 1: completed on Dec 3, 2001 11:16.
	      SafeBack execution ended on Dec 3, 2001 11:17.
	Safeback log: DI-156/SB_156R.TXT
	      SafeBack 2.18 13Feb01 execution started on Dec 3, 2001 11:20.
	11:21:11 Menu selections:
	      Function: Restore
	      Direct access: Yes
	      Use XBIOS: Auto

Case DI-156 for SafeBack 2.18	

	Adjust partitions: No
	          Backfill on restore: No
	11:21:24 Backup file created on Dec 3, 2001 10:50
	          by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	          Backup file comment record:
	           DI-156 ASPI
	11:21:28 Backup file E:\IMG.001 opened for access.
	11:23:07 Restore of drive 1: from E:\IMG.001
	          to drive 2: started on Dec 3, 2001 11:23
	11:23:07 Partition fixup has been disabled.
	11:23:07 Local SafeBack is running on DOS 7.10
	          Source drive 1:
	           Capacity........8759 MB
	           Cylinders.......17338
	           Heads...........3
	           SCSI ASPI driver direct drive access used.
	          Destination drive 2:
	           Capacity.......8759 MB
	           Cylinders.......17338
	           Heads...........3
	           Model: QUANTUM ATLAS10K2-TY092J
	           Serial Number: 16902814
	           Firmware version: DDD6
	           SCSI ASPI driver direct drive access used.
	11:23:07 IMG.001, record 0 has a CRC error. 4321 was expected, but f4c3
	read.
	11:23:13 Backup file CRC error ignored by recovery at sector 0.
	11:23:16 Data starting at sector 0 and the next 119 sectors is
	          questionable due to CRC errors.
	11:30:00 Backup file E:\IMG.002 opened for access.
	11:36:49 Backup file E:\IMG.003 opened for access.
	11:43:38 Backup file E:\IMG.004 opened for access.
	11:49:53 Backup file E:\IMG.005 opened for access.
	11:51:41 CRC mismatch: Calculated: d93406b9, Read: 99be1833
	12:02:35 Restore of drive 1: to drive 2: completed on Dec 3, 2001 12:02
	12:02:42 Menu selections:
	          Function: Restore
	          Direct access: Yes
	          Use XBIOS: Auto
	          Adjust partitions: No
	          Backfill on restore: No
	          SafeBack execution ended on Dec 3, 2001 12:02.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 1
	Diffs range 9
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0

Expected Results:	Source disk is unchanged image verification error
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-157 for SafeBack 2.18	
Case Summary:	Create an image from an ASPI SCSI source disk to an ASPI SCSI destination disk where the source disk is the same size as the destination
Tester Name:	JRL
Test Date:	Thu Nov 15 17:51:53 2001
PC:	Wimsey
Disks:	Source: DOS Drive 81 Physical Label E4 Destination: DOS Drive 82 Physical Label E2 Image media: DOS Drive 80 Physical Label A7 E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors E2 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2

Case DI-157 for SafeBack 2.18	
Source disk setup:	Windows 2000 with NTFS & Fat32 Disk: E4 Host: JudgeDee Operator: JRL OS: Windows 2000/NT Date: Sat Jul 21 16:58:28 2001 DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000 source disk X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-157 Wimsey 81 E2 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-157 Wimsey 81 /all /new_log /comment JRL(E2) Z:\ss\PARTAB.EXE DI-157 Wimsey 82 /all /new_log /comment JRL(E2) z:\sb\master (backup to image) Z:\ss\DISKCMP.EXE DI-157 Wimsey 81 E4 82 E2 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-157 Wimsey 81 /comment JRL(E4) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-157

Log File Highlights:	Safeback log: DI-157/SB_157B.TXT
	       SafeBack 2.18 13Feb01 execution started on Nov 15, 2001 18:18.
	18:18:38 Menu selections:
	       Function: Backup
	       Direct access: Yes
	       Use XBIOS: Auto
	       Adjust partitions: No
	       Backfill on restore: No
	18:19:37 Backup file E:\IMG.001 created.
	       Backup file comment record:
	        DI-157
	18:19:44 Backing up drive 1:
	       to E:\IMG.001 on Nov 15, 2001 18:19
	18:19:45 Local SafeBack is running on DOS 7.10
	       Source drive 1:
	        Capacity........8759 MB
	        Cylinders.......17338
	        Heads...........3
	        Model: QUANTUM ATLAS10K2-TY092J
	        Serial Number: 16902814
	        Firmware version: DDD6
	        SCSI ASPI driver direct drive access used.
	18:19:45 Partition table for drive 1:
	18:25:54 Backup file E:\IMG.002 created.
	18:32:05 Backup file E:\IMG.003 created.
	18:38:16 Backup file E:\IMG.004 created.
	18:44:25 Backup file E:\IMG.005 created.
	18:46:11 Backup file CRC: 80075fd6.
	18:46:11 Backup of drive 1: completed on Nov 15, 2001 18:46.
	       SafeBack execution ended on Nov 15, 2001 18:46.
	Safeback log: DI-157/SB_157R.txt
	       SafeBack 2.18 13Feb01 execution started on Nov 15, 2001 18:46.
	18:47:26 Menu selections:
	       Function: Restore
	       Direct access: Yes
	       Use XBIOS: Auto
	       Adjust partitions: No
	       Backfill on restore: No
	18:47:55 Backup file created on Nov 15, 2001 18:19
	       by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	       Backup file comment record:
	        DI-157
	18:48:00 Backup file E:\IMG.001 opened for access.
	18:48:34 Restore of drive 1: from E:\IMG.001
	       to drive 2: started on Nov 15, 2001 18:48

Case DI-157 for SafeBack 2.18	

	18:48:34 Partition fixup has been disabled.
	18:48:34 Local SafeBack is running on DOS 7.10
	          Source drive 1:
	            Capacity.........8759 MB
	            Cylinders........17338
	            Heads............3
	            SCSI ASPI driver direct drive access used.
	          Destination drive 2:
	            Capacity.........8759 MB
	            Cylinders........17338
	            Heads............3
	            Model: QUANTUM ATLAS10K2-TY092J
	            Serial Number: 16902814
	            Firmware version: DDD6
	            SCSI ASPI driver direct drive access used.
	18:54:51 Backup file E:\IMG.002 opened for access.
	19:01:10 Backup file E:\IMG.003 opened for access.
	19:07:31 Backup file E:\IMG.004 opened for access.
	19:13:58 Backup file E:\IMG.005 opened for access.
	19:15:49 The whole-file CRC verifies: 80075fd6
	19:15:49 Restore of drive 1: to drive 2: completed on Nov 15, 2001 19:15
	19:16:55 Menu selections:
	            Function: Restore
	            Direct access: Yes
	            Use XBIOS: Auto
	            Adjust partitions: No
	            Backfill on restore: No
	          SafeBack execution ended on Nov 15, 2001 19:16.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 0
	Diffs range
	Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF

Expected Results:	Source disk is unchanged src compares equal to dst
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-158 for SafeBack 2.18	
Case Summary:	Create an image from an ASPI SCSI source disk to an ASPI SCSI destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Tue Nov 27 16:29:48 2001
PC:	Wimsey
Disks:	Source: DOS Drive 81 Physical Label E4 Destination: DOS Drive 82 Physical Label EC Image media: DOS Drive 80 Physical Label A7 E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors EC is a SEAGATE ST39204LC with 17921835 sectors A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32 Disk: E4 Host: JudgeDee Operator: JRL OS: Windows 2000/NT Date: Sat Jul 21 16:58:28 2001 DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000 source disk X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination	Z:\ss\DISKWIPE.EXE DI-158 Wimsey 81 EC /noask /dst /new_log /comment JRL

Case DI-158 for SafeBack 2.18	
Setup:	
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-158 Wimsey 81 /all /new_log /comment JRL(EC) Z:\ss\PARTAB.EXE DI-158 Wimsey 82 /all /new_log /comment JRL(EC) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-158 Wimsey 81 E4 82 EC /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-158 Wimsey 81 /comment JRL(E4) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-158

Log File Highlights:	Safeback log: DI-158/SB_158B.txt
	      SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 18:01.
	18:01:25 Menu selections:
	      Function: Backup
	      Direct access: Yes
	      Use XBIOS: Auto
	      Adjust partitions: No
	      Backfill on restore: No
	18:02:17 Backup file E:\IMG.001 created.
	      Backup file comment record:
	        DI-158
	18:02:27 Backing up drive 1:
	      to E:\IMG.001 on Nov 27, 2001 18:02
	18:02:28 Local SafeBack is running on DOS 7.10
	      Source drive 1:
	        Capacity........8759 MB
	        Cylinders.......17338
	        Heads...........3
	        Model: QUANTUM ATLAS10K2-TY092J
	        Serial Number: 16902814
	        Firmware version: DDD6
	        SCSI ASPI driver direct drive access used.
	18:02:28 Partition table for drive 1:
	18:08:37 Backup file E:\IMG.002 created.
	18:14:48 Backup file E:\IMG.003 created.
	18:21:02 Backup file E:\IMG.004 created.
	18:27:13 Backup file E:\IMG.005 created.
	18:28:59 Backup file CRC: 1af88216.
	18:28:59 Backup of drive 1: completed on Nov 27, 2001 18:28.
	      SafeBack execution ended on Nov 27, 2001 18:30.
	Safeback log: DI-158/SB_158R.TXT
	      SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 18:31.
	18:31:26 Menu selections:
	      Function: Restore
	      Direct access: Yes
	      Use XBIOS: Auto
	      Adjust partitions: No
	      Backfill on restore: No
	18:32:37 Backup file created on Nov 27, 2001 18:02
	      by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	      Backup file comment record:
	        DI-158
	18:32:44 Backup file E:\IMG.001 opened for access.
	18:33:15 The destination drive capacity is smaller than that of the
	      original source drive.
	18:33:21 Restore of drive 1: from E:\IMG.001
	      to drive 2: started on Nov 27, 2001 18:33
	18:33:21 Partition fixup has been disabled.
	18:33:21 Local SafeBack is running on DOS 7.10
	      Source drive 1:
	        Capacity........8759 MB
	        Cylinders.......17338
	        Heads...........3
	        SCSI ASPI driver direct drive access used.
	      Destination drive 2:
	        Capacity........8751 MB
	        Cylinders.......14384
	        Heads...........3
	        Model: SEAGATE ST39204LC
	        Serial Number: 3BV0QB1B

Case DI-158 for SafeBack 2.18	
	Firmware version: 0006
	SCSI ASPI driver direct drive access used.
	18:39:39 Backup file E:\IMG.002 opened for access.
	18:46:27 Backup file E:\IMG.003 opened for access.
	18:52:51 Backup file E:\IMG.004 opened for access.
	18:59:18 Backup file E:\IMG.005 opened for access.
	19:01:08 Restore of drive 1: to drive 2: completed on Nov 27, 2001 19:01
	19:05:06 Menu selections:
	Function: Restore
	Direct access: Yes
	Use XBIOS: Auto
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Nov 27, 2001 19:05.
	= = = = Measurement Logs = = = =
	Sectors Compared 17921835
	Sectors Differ 0
	Diffs range
	Source (17938985) has 17150 more sectors than destination (17921835)
	Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Expected Results:	Source disk is unchanged
	src compares qualified equal to dst, src is truncated on dst
	truncation is logged
Actual Results:	No anomalies
Analysis:	Expected results achieved

Case DI-159 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk
	to an XBIOS-SCSI destination disk
	where the source disk is smaller than the destination
	Introduce an error on the image.
Tester Name:	JRL
Test Date:	Mon Dec 17 14:44:37 2001
PC:	JudgeDee
Disks:	Source: DOS Drive 80 Physical Label F1
	Destination: DOS Drive 82 Physical Label E6
	Image media: DOS Drive 81 Physical Label A8
	F1 is a Quantum Sirooco1700A with 3335472 sectors
	E6 is a SEAGATE ST318404LC with 35843670 sectors
	A8 is a WDC WD200BB-00AUA1 with 39102336 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & Fat32
	Disk: F1
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Fri Nov 16 10:42:33 2001
	cmd: Z:\ss\DISKWIPE.EXE F1 JudgeDee 80 F1 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\f32-src.txt
	Load Operating System to Source disk
	cmd: Z:\ss\DISKHASH.EXE F1 JudgeDee 80 /before /new_log
	Disk hash = 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-159 JudgeDee 81 E6 /noask /dst /new_log /comment JRL
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-159 Host D:\IMG.001 900 AE /comment None
	Change byte 900 of file D:\IMG.001 from 0xFFF1 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-159 JudgeDee 80 /all /new_log /comment JRL(E6)
	Z:\ss\PARTAB.EXE DI-159 JudgeDee 82 /all /new_log /comment JRL(E6)
	z:\sb\master (backup to image)
	z:\sb\master (restore from image)
	Z:\ss\DISKCMP.EXE DI-159 JudgeDee 80 F1 82 E6 /new_log /comment JRL
	Z:\ss\DISKHASH.EXE DI-159 JudgeDee 80 /comment JRL(F1) /new_log /after
Log files	test-archive/sb/sb-2.18/DI-159

Case DI-159 for SafeBack 2.18	
loc:	

Log File
Highlights:
	Safeback log: DI-159/SB_159B.TXT
	    SafeBack 2.18 13Feb01 execution started on Dec 17, 2001 15:07.
	15:07:40 Menu selections:
	     Function: Backup
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	15:08:01 Backup file D:\IMG.001 created.
	     Backup file comment record:
	      DI-159
	15:08:08 Backing up drive 0:
	     to D:\IMG.001 on Dec 17, 2001 15:08
	15:08:09 Local SafeBack is running on DOS 7.10
	     Source drive 0:
	      Capacity........1629 MB
	      Cylinders.......3309
	      Heads...........16
	15:08:09 Partition table for drive 0:
	15:17:41 Backup file CRC: a5863044.
	15:17:41 Backup of drive 0: completed on Dec 17, 2001 15:17.
	     SafeBack execution ended on Dec 17, 2001 15:46.
	Safeback log: DI-159/SB_159R.TXT
	    SafeBack 2.18 13Feb01 execution started on Dec 17, 2001 15:47.
	15:47:57 Menu selections:
	     Function: Restore
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	15:48:06 Backup file created on Dec 17, 2001 15:08
	     by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	     Backup file comment record:
	      DI-159
	15:48:08 Backup file D:\IMG.001 opened for access.
	15:48:50 Restore of drive 0: from D:\IMG.001
	     to drive 2: started on Dec 17, 2001 15:48
	15:48:50 Partition fixup has been disabled.
	15:48:50 Local SafeBack is running on DOS 7.10
	     Source drive 0:
	      Capacity........1629 MB
	      Cylinders.......3309
	      Heads...........16
	     Destination drive 2:
	      Capacity........17502 MB
	      Cylinders.......2231
	      Heads...........255
	15:48:50 IMG.001, record 0 has a CRC error. 159f was expected, but a3ce
	read.
	15:48:55 Backup file CRC error ignored by recovery at sector 0.
	15:48:57 Data starting at sector 0 and the next 119 sectors is
	     questionable due to CRC errors.
	15:54:04 CRC mismatch: Calculated: 5a8e4fad, Read: a5863044
	16:07:29 Restore of drive 0: to drive 2: completed on Dec 17, 2001 16:07
	16:17:44 Menu selections:
	     Function: Restore
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	     SafeBack execution ended on Dec 17, 2001 16:17.
	= = = = Measurement Logs = = = =
	Sectors Compared 3335472
	Sectors Differ 1
	Diffs range 1
	Source (3335472) has 32508198 fewer sectors than destination (35843670)
	Zero fill: 32508198
	Src Byte fill (F1): 0

Case DI-159 for SafeBack 2.18	
	Dst Byte fill (E6): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 3E7E5E0AB0FA333BE39D267F0DB8E340386DC05A
Expected Results:	Source disk is unchanged
	image verification error
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-160 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk
	to an XBIOS-SCSI destination disk
	where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Tue Dec 04 15:58:51 2001
PC:	Rumpole
Disks:	Source: DOS Drive 80 Physical Label B8
	Destination: DOS Drive 82 Physical Label EB
	Image media: DOS Drive 81 Physical Label A8
	B8 is a WDC AC21600H with 3173184 sectors
	EB is a SEAGATE ST39204LC with 17921835 sectors
	A8 is a WDC WD200BB-00AUA1 with 39102336 sectors
	Jaz disk with partition magic and scripts
	FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Linux EXT2 & DOS Fat16
	Disk: B8
	Host: JudgeDee
	Operator: JRL
	OS: Windows/Me
	Options: Typical
	Date: Thu Oct 18 13:47:31 2001
	cmd: Z:\ss\DISKWIPE.EXE B8 JudgeDee 80 B8 /src /new_log
	X:\pm\pqmagic /cmd=X:\pm\nex-src.txt
	Load Operating System to Source disk
	cmd: z:\ss\DISKHASH.EXE B8_src Cadfael 80 /before /new_log
	Disk hash = F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-160 Rumpole 81 A8 /noask /dst /new_log /comment B8
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-160 Rumpole 80 /all /new_log /comment B8(A8)
	Z:\ss\PARTAB.EXE DI-160 Rumpole 82 /all /new_log /comment B8(A8)
	z:\sb\master (backup to image)
	z:\sb\master (restore from image)
	Z:\ss\DISKCMP.EXE DI-160 Rumpole 80 EB 82 A8 /new_log /comment B8
	Z:\ss\DISKHASH.EXE DI-160 Rumpole 80 /comment B8(EB) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-160
Log File Highlights:	Safeback log: DI-160/SB_160B.TXT
	SafeBack 2.18 13Feb01 execution started on Dec 4, 2001 17:34.
	The tape drive was not used.
	17:34:42 Menu selections:
	Function: Backup
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	17:36:17 Backup file D:\IMG.001 created.
	Backup file comment record:
	DI-160
	17:36:22 Backing up drive 0:
	to D:\IMG.001 on Dec 4, 2001 17:36
	17:36:23 Local SafeBack is running on DOS 7.10
	Source drive 0:
	Capacity........1549 MB
	Cylinders.......3148

```
Case DI-160 for SafeBack 2.18
                   Heads...........16
         17:36:23  Partition table for drive 0:
         17:45:45  Backup file CRC: b4fc3848.
         17:45:45  Backup of drive 0: completed on Dec  4, 2001 17:45.
                   SafeBack execution ended on Dec  4, 2001 17:54.
         Safeback log: DI-160/SB_160R.TXT
                   SafeBack 2.18 13Feb01 execution started on Dec  4, 2001 17:55.
                   The tape drive was not used.
         17:55:37  Menu selections:
                       Function:            Restore
                       Direct access:       No
                       Use XBIOS:           Yes
                       Adjust partitions:   No
                       Backfill on restore:  No
         17:55:51  Backup file created on Dec  4, 2001 17:36
                       by Gary Fisher Natl Institute of Standards & Technology
         Software Diagnostics & Con
                       Backup file comment record:
                       DI-160
         17:55:54  Backup file D:\IMG.001 opened for access.
         17:56:44  XBIOS access mode for source and destination drives is
         different.
         17:57:34  Restore operation terminated by error or user.
         17:57:35  Menu selections:
                       Function:            Restore
                       Direct access:       No
                       Use XBIOS:           Yes
                       Adjust partitions:   No
                       Backfill on restore:  No
         17:57:58  Backup file created on Dec  4, 2001 17:36
                       by Gary Fisher Natl Institute of Standards & Technology
         Software Diagnostics & Con
                       Backup file comment record:
                       DI-160
         17:58:05  Backup file D:\IMG.001 opened for access.
         17:58:34  Menu selections:
                       Function:            Restore
                       Direct access:       No
                       Use XBIOS:           Auto
                       Adjust partitions:   No
                       Backfill on restore:  No
         17:58:45  Backup file created on Dec  4, 2001 17:36
                       by Gary Fisher Natl Institute of Standards & Technology
         Software Diagnostics & Con
                       Backup file comment record:
                       DI-160
         17:58:47  Backup file D:\IMG.001 opened for access.
         17:59:28  XBIOS access mode for source and destination drives is
         different.
         18:01:41  Restore of drive 0: from D:\IMG.001
                   to drive 2: started on Dec  4, 2001 18:01
         18:01:41  Partition fixup has been disabled.
         18:01:41  Local SafeBack is running on DOS 7.10
                   Source drive 0:
                     Capacity........1549 MB
                     Cylinders.......3148
                     Heads...........16
                   Destination drive 2:
                     Capacity........8025 MB
                     Cylinders.......1023
                     Heads...........255
         18:07:26  The whole-file CRC verifies:  b4fc3848
         18:14:01  Restore of drive 0: to drive 2: completed on Dec  4, 2001 18:14
         18:14:10  Menu selections:
                       Function:            Restore
                       Direct access:       No
                       Use XBIOS:           Auto
                       Adjust partitions:   No
                       Backfill on restore:  No
                   SafeBack execution ended on Dec  4, 2001 18:14.
```

Case DI-160 for SafeBack 2.18	
	= = = = Measurement Logs = = = = Sectors Compared 3173184 Sectors Differ 0 Diffs range Source (3173184) has 13261311 fewer sectors than destination (16434495) Zero fill: 13261311 Src Byte fill (EB): 0 Dst Byte fill (A8): 0 Other fill: 0 Other no fill: 0 Hash after test: F8C64E5C2049AEA8875D913ABAF2568286AE6FF2
Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-161 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-IDE source disk to an XBIOS-SCSI destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Mon Dec 17 10:26:58 2001
PC:	Cadfael
Disks:	Source: DOS Drive 80 Physical Label F6 Destination: DOS Drive 82 Physical Label EB Image media: DOS Drive 81 Physical Label AB F6 is an IBM-DTLA-307020 with 40188960 sectors EB is a SEAGATE ST39204LC with 17921835 sectors AB is a Maxtor53073H4 with 60030432 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32 Disk: F6 Host: Wimsey Operator: JRL OS: Windows 2000 Date: Sat Jul 21 15:53:12 2001 DISKWIPE.EXE F6_SRC Wimsey 80 F6 /src /new_log /noask /comment Windows 2000/NT source X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk DISKHASH.EXE LX-27 Morse 80 /before Disk hash = 8034683D5D55BA51409AC7B5CB0845CA2CF6B235
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-161 Cadfael 81 EB /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-161 Cadfael 80 /all /new_log /comment JRL(EB) Z:\ss\PARTAB.EXE DI-161 Cadfael 82 /all /new_log /comment JRL(EB) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-161 Cadfael 80 F6 82 EB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-161 Cadfael 80 /comment JRL(F6) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-161

Log File
 Highlights:
	Safeback log: DI-161/SB_161B.TXT
	       SafeBack 2.18 13Feb01 execution started on Dec 17, 2001 10:50.
	 10:50:19 Menu selections:
	        Function: Backup
	        Direct access: No
	        Use XBIOS: Yes
	        Adjust partitions: No
	        Backfill on restore: No
	 10:51:32 Backup file E:\IMG.001 created.
	       Backup file comment record:
	        DI-161

Case DI-161 for SafeBack 2.18	

	10:51:39 Backing up drive 0:
	        to E:\IMG.001 on Dec 17, 2001 10:51
	10:51:40 Local SafeBack is running on DOS 7.10
	        Source drive 0:
	          Capacity........19624 MB
	          Cylinders.......2501
	          Heads...........255
	10:51:40 Partition table for drive 0:
	11:00:31 Backup file E:\IMG.002 created.
	11:09:21 Backup file E:\IMG.003 created.
	11:18:12 Backup file E:\IMG.004 created.
	11:27:02 Backup file E:\IMG.005 created.
	11:35:49 Backup file E:\IMG.006 created.
	11:44:37 Backup file E:\IMG.007 created.
	11:53:26 Backup file E:\IMG.008 created.
	12:02:15 Backup file E:\IMG.009 created.
	12:11:05 Backup file E:\IMG.010 created.
	12:16:24 Backup file CRC: 7b1b17db.
	12:16:26 Backup of drive 0: completed on Dec 17, 2001 12:16.
	        SafeBack execution ended on Dec 17, 2001 12:40.
	Safeback log: DI-161/SB_161R.TXT
	        SafeBack 2.18 13Feb01 execution started on Dec 17, 2001 12:46.
	12:47:01 Menu selections:
	        Function: Restore
	        Direct access: No
	        Use XBIOS: Yes
	        Adjust partitions: No
	        Backfill on restore: No
	12:47:11 Backup file created on Dec 17, 2001 10:51
	        by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	        Backup file comment record:
	          DI-161
	12:47:14 Backup file E:\IMG.001 opened for access.
	12:47:31 The destination drive capacity is smaller than that of the
	        original source drive.
	12:47:40 Restore of drive 0: from E:\IMG.001
	        to drive 2: started on Dec 17, 2001 12:47
	12:47:40 Partition fixup has been disabled.
	12:47:40 Local SafeBack is running on DOS 7.10
	        Source drive 0:
	          Capacity........19624 MB
	          Cylinders.......2501
	          Heads...........255
	        Destination drive 2:
	          Capacity........8751 MB
	          Cylinders.......1115
	          Heads...........255
	12:53:33 Backup file E:\IMG.002 opened for access.
	12:59:24 Backup file E:\IMG.003 opened for access.
	13:05:14 Backup file E:\IMG.004 opened for access.
	13:11:05 Backup file E:\IMG.005 opened for access.
	13:12:44 Restore of drive 0: to drive 2: completed on Dec 17, 2001 13:12
	13:15:10 Menu selections:
	        Function: Restore
	        Direct access: No
	        Use XBIOS: Yes
	        Adjust partitions: No
	        Backfill on restore: No
	        SafeBack execution ended on Dec 17, 2001 13:15.
	= = = = Measurement Logs = = = =
	Sectors Compared 17921835
	Sectors Differ 0
	Diffs range
	Source (40188960) has 22267125 more sectors than destination (17921835)
	Hash after test: 8034683D5D55BA51409AC7B5CB0845CA2CF6B235

Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual	No anomalies

Case DI-161 for SafeBack 2.18	
Results:	
Analysis:	Expected results achieved

Case DI-162 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-IDE destination disk where the source disk is smaller than the destination Introduce an error on the image.
Tester Name:	JRL
Test Date:	Tue Dec 04 11:01:30 2001
PC:	Wimsey
Disks:	Source: DOS Drive 82 Physical Label E3 Destination: DOS Drive 81 Physical Label A6 Image media: DOS Drive 80 Physical Label A7 E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors A6 is a WDC WD200BB-00AUA1 with 39102336 sectors A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-162 Wimsey 81 A6 /noask /dst /new_log /comment JRL
Error Setup:	cmd: Z:\ss\CORRUPT.EXE DI-162 Host F:\IMG.001 6938 AE /comment None Change byte 6938 of file F:\IMG.001 from 0x30 to 0xFFAE
Execute:	Z:\ss\PARTAB.EXE DI-162 Wimsey 81 /all /new_log /comment JRL(A6) Z:\ss\PARTAB.EXE DI-162 Wimsey 82 /all /new_log /comment JRL(A6) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-162 Wimsey 82 E3 81 A6 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-162 Wimsey 82 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-162

Log File
Highlights:
	Safeback log: DI-162/SB_162B.TXT
	      SafeBack 2.18 13Feb01 execution started on Dec 4, 2001 11:54.
	11:55:14 Menu selections:
	      Function: Backup
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	11:55:38 Backup file F:\IMG.001 created.
	      Backup file comment record:
	        DI-162
	11:55:49 Backing up drive 2:
	      to F:\IMG.001 on Dec 4, 2001 11:55
	11:55:51 Local SafeBack is running on DOS 7.10
	      Source drive 2:
	        Capacity........8759 MB
	        Cylinders.......1116
	        Heads...........255
	11:55:51 Partition table for drive 2:
	12:02:12 Backup file F:\IMG.002 created.
	12:08:42 Backup file F:\IMG.003 created.
	12:15:03 Backup file F:\IMG.004 created.
	12:21:15 Backup file F:\IMG.005 created.
	12:23:02 Backup file CRC: f7c78030.
	12:23:03 Backup of drive 2: completed on Dec 4, 2001 12:23.

Case DI-162 for SafeBack 2.18	
	SafeBack execution ended on Dec 4, 2001 13:18.
	Safeback log: DI-162/SB_162R.TXT
	SafeBack 2.18 13Feb01 execution started on Dec 4, 2001 13:19.
	13:20:13 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	13:20:27 Backup file created on Dec 4, 2001 11:55
	by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	Backup file comment record:
	DI-162
	13:20:30 Backup file F:\IMG.001 opened for access.
	13:21:06 Restore of drive 2: from F:\IMG.001
	to drive 1: started on Dec 4, 2001 13:21
	13:21:06 Partition fixup has been disabled.
	13:21:06 Local SafeBack is running on DOS 7.10
	Source drive 2:
	Capacity........8759 MB
	Cylinders.......1116
	Heads...........255
	Destination drive 1:
	Capacity........19093 MB
	Cylinders.......2434
	Heads...........255
	13:21:06 IMG.001, record 0 has a CRC error. df51 was expected, but 791d read.
	13:21:13 Backup file CRC error ignored by recovery at sector 0.
	13:21:15 Data starting at sector 0 and the next 119 sectors is
	questionable due to CRC errors.
	13:31:36 Backup file F:\IMG.002 opened for access.
	13:42:01 Backup file F:\IMG.003 opened for access.
	13:51:51 Backup file F:\IMG.004 opened for access.
	14:01:44 Backup file F:\IMG.005 opened for access.
	14:04:34 CRC mismatch: Calculated: efe8f293, Read: f7c78030
	14:26:32 Restore of drive 2: to drive 1: completed on Dec 4, 2001 14:26
	14:27:46 Menu selections:
	Function: Restore
	Direct access: No
	Use XBIOS: Yes
	Adjust partitions: No
	Backfill on restore: No
	SafeBack execution ended on Dec 4, 2001 14:27.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 1
	Diffs range 13
	Source (17938985) has 21163351 fewer sectors than destination (39102336)
	Zero fill: 21163351
	Src Byte fill (E3): 0
	Dst Byte fill (A6): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0
Expected Results:	Source disk is unchanged
	image verification error
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-163 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk
	to an XBIOS-IDE destination disk
	where the source disk is smaller than the destination
Tester Name:	JRL
Test Date:	Mon Dec 03 14:34:42 2001
PC:	Wimsey

Case DI-163 for SafeBack 2.18	
Disks:	Source: DOS Drive 82 Physical Label E3 Destination: DOS Drive 81 Physical Label A6 Image media: DOS Drive 80 Physical Label A7 E3 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors A6 is a WDC WD200BB-00AUA1 with 39102336 sectors A7 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Dual boot Linux/Windows Me with EXT2 & Fat16 Disk: E3 Host: Cadfael Operator: JRL OS: Linux Red Hat 7.1/Windows Me Date: Sat Jul 21 16:17:29 2001 DISKWIPE.EXE E3_SRC Rumpole 80 E3 /src /new_log X:\pm\pqmagic /cmd=X:\pm\fat-src.txt Load Operating System to Source disk DISKHASH.EXE E3_SRC Rumpole 80 /before Disk hash = 0F9DACDA6C63D197C048782003D324108CEC7AB0
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-163 Wimsey 81 A6 /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-163 Wimsey 81 /all /new_log /comment JRL(A6) Z:\ss\PARTAB.EXE DI-163 Wimsey 82 /all /new_log /comment JRL(A6) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-163 Wimsey 82 E3 81 A6 /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-163 Wimsey 82 /comment JRL(E3) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-163

Log File Highlights:	Safeback log: DI-163/SB_163B.TXT
	     SafeBack 2.18 13Feb01 execution started on Dec 3, 2001 15:23.
	15:23:42 Menu selections:
	     Function: Backup
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	15:24:08 Backup file F:\IMG.001 created.
	     Backup file comment record:
	     DI-163
	15:24:15 Backing up drive 2:
	     to F:\IMG.001 on Dec 3, 2001 15:24
	15:24:16 Local SafeBack is running on DOS 7.10
	     Source drive 2:
	     Capacity........8759 MB
	     Cylinders.......1116
	     Heads...........255
	15:24:16 Partition table for drive 2:
	15:30:34 Backup file F:\IMG.002 created.
	15:36:49 Backup file F:\IMG.003 created.
	15:43:03 Backup file F:\IMG.004 created.
	15:49:26 Backup file F:\IMG.005 created.
	15:51:15 Backup file CRC: 463ad0b1.
	15:51:15 Backup of drive 2: completed on Dec 3, 2001 15:51.
	     SafeBack execution ended on Dec 3, 2001 15:54.
	Safeback log: DI-163/SB_163R.TXT
	     SafeBack 2.18 13Feb01 execution started on Dec 3, 2001 15:55.
	15:55:46 Menu selections:
	     Function: Restore
	     Direct access: No
	     Use XBIOS: Yes
	     Adjust partitions: No
	     Backfill on restore: No
	15:56:05 Backup file created on Dec 3, 2001 15:24
	     by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con

Case DI-163 for SafeBack 2.18	

	Backup file comment record:
	    DI-163
	15:56:06 Backup file F:\IMG.001 opened for access.
	15:57:03 Restore of drive 2: from F:\IMG.001
	          to drive 1: started on Dec 3, 2001 15:57
	15:57:03 Partition fixup has been disabled.
	15:57:03 Local SafeBack is running on DOS 7.10
	          Source drive 2:
	            Capacity........8759 MB
	            Cylinders.......1116
	            Heads...........255
	          Destination drive 1:
	            Capacity........19093 MB
	            Cylinders.......2434
	            Heads...........255
	16:06:59 Backup file F:\IMG.002 opened for access.
	16:16:58 Backup file F:\IMG.003 opened for access.
	16:27:01 Backup file F:\IMG.004 opened for access.
	16:37:11 Backup file F:\IMG.005 opened for access.
	16:40:06 The whole-file CRC verifies: 463ad0b1
	17:00:35 Restore of drive 2: to drive 1: completed on Dec 3, 2001 17:00
	17:00:44 Menu selections:
	            Function: Restore
	            Direct access: No
	            Use XBIOS: Yes
	            Adjust partitions: No
	            Backfill on restore: No
	          SafeBack execution ended on Dec 3, 2001 17:00.
	= = = = Measurement Logs = = = =
	Sectors Compared 17938985
	Sectors Differ 0
	Diffs range
	Source (17938985) has 21163351 fewer sectors than destination (39102336)
	Zero fill: 21163351
	Src Byte fill (E3): 0
	Dst Byte fill (A6): 0
	Other fill: 0
	Other no fill: 0
	Hash after test: 0F9DACDA6C63D197C048782003D324108CEC7AB0

Expected Results:	Source disk is unchanged src compares qualified equal to dst
Actual Results:	Backfill anomaly
Analysis:	Expected results not achieved

Case DI-164 for SafeBack 2.18	
Case Summary:	Create an image from an XBIOS-SCSI source disk to an XBIOS-IDE destination disk where the source disk is larger than the destination
Tester Name:	JRL
Test Date:	Tue Dec 04 10:08:37 2001
PC:	Cadfael
Disks:	Source: DOS Drive 82 Physical Label E4 Destination: DOS Drive 81 Physical Label BB Image media: DOS Drive 80 Physical Label A8 E4 is a QUANTUM ATLAS10K2-TY092J with 17938985 sectors BB is a QUANTUM FIREBALL ST3.2A with 6306048 sectors A8 is a WDC WD200BB-00AUA1 with 39102336 sectors Jaz disk with partition magic and scripts FS-TST Release 1.0 CD-ROM + baddisk Version 3.2
Source disk setup:	Windows 2000 with NTFS & Fat32 Disk: E4 Host: JudgeDee Operator: JRL OS: Windows 2000/NT Date: Sat Jul 21 16:58:28 2001 DISKWIPE.EXE E4_SRC JudgeDee 80 E4 /src /noask /comment Windows 2000 source disk

Case DI-164 for SafeBack 2.18	
	X:\pm\pqmagic /cmd=X:\pm\nt-src.txt Load Operating System to Source disk cmd: X:\ss\DISKHASH.EXE Hash Wimsey 80 /comment E4 /new_log /before Disk hash = 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Destination Setup:	Z:\ss\DISKWIPE.EXE DI-164 Cadfael 81 BB /noask /dst /new_log /comment JRL
Error Setup:	none
Execute:	Z:\ss\PARTAB.EXE DI-164 Cadfael 81 /all /new_log /comment JRL(BB) Z:\ss\PARTAB.EXE DI-164 Cadfael 82 /all /new_log /comment JRL(BB) z:\sb\master (backup to image) z:\sb\master (restore from image) Z:\ss\DISKCMP.EXE DI-164 Cadfael 82 E4 81 BB /new_log /comment JRL Z:\ss\DISKHASH.EXE DI-164 Cadfael 82 /comment JRL(E4) /new_log /after
Log files loc:	test-archive/sb/sb-2.18/DI-164

Log File Highlights:	Safeback log: DI-164/SB_164.TXT
	      SafeBack 2.18 13Feb01 execution started on Nov 27, 2001 12:12.
	12:13:21 Menu selections:
	      Function: Restore
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	12:14:12 Backup file created on Nov 27, 2001 11:16
	      by Gary Fisher Natl Institute of Standards & Technology
	Software Diagnostics & Con
	      Backup file comment record:
	       DI-164
	12:14:14 Backup file E:\IMG.001 opened for access.
	12:14:28 The destination drive capacity is smaller than that of the
	      original source drive.
	12:14:38 Restore of drive 1: from E:\IMG.001
	      to drive 2: started on Nov 27, 2001 12:14
	12:14:38 Partition fixup has been disabled.
	12:14:38 Local SafeBack is running on DOS 7.10
	      Source drive 1:
	       Capacity........8759 MB
	       Cylinders.......1116
	       Heads...........255
	      Destination drive 2:
	       Capacity........8751 MB
	       Cylinders.......1115
	       Heads...........255
	12:22:19 Backup file E:\IMG.002 opened for access.
	12:30:53 Backup file E:\IMG.003 opened for access.
	12:38:09 Backup file E:\IMG.004 opened for access.
	12:45:02 Backup file E:\IMG.005 opened for access.
	12:46:54 Restore of drive 1: to drive 2: completed on Nov 27, 2001 12:46
	13:25:22 Menu selections:
	      Function: Restore
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	      SafeBack execution ended on Nov 27, 2001 13:25.
	Safeback log: DI-164/SB_164B.TXT
	      SafeBack 2.18 13Feb01 execution started on Dec 4, 2001 10:21.
	10:22:12 Menu selections:
	      Function: Backup
	      Direct access: No
	      Use XBIOS: Yes
	      Adjust partitions: No
	      Backfill on restore: No
	10:22:58 Backup file F:\IMG.001 created.
	      Backup file comment record:
	       DI-164
	10:23:05 Backing up drive 2:
	      to F:\IMG.001 on Dec 4, 2001 10:23
	10:23:07 Local SafeBack is running on DOS 7.10

Case DI-164 for SafeBack 2.18	
	Source drive 2: 　　　Capacity........8759 MB 　　　Cylinders.......1116 　　　Heads..........255 10:23:07　Partition table for drive 2: 10:29:18　Backup file F:\IMG.002 created. 10:35:30　Backup file F:\IMG.003 created. 10:41:44　Backup file F:\IMG.004 created. 10:48:02　Backup file F:\IMG.005 created. 10:49:53　Backup file CRC: 30d1eb6a. 10:49:53　Backup of drive 2: completed on Dec　4, 2001 10:49. 　　　　SafeBack execution ended on Dec　4, 2001 10:49. Safeback log: DI-164/SB_164R.TXT 　　　　SafeBack 2.18 13Feb01 execution started on Dec　4, 2001 10:51. 10:51:31　Menu selections: 　　　Function:　　　　　Restore 　　　Direct access:　　　No 　　　Use XBIOS:　　　　Yes 　　　Adjust partitions:　No 　　　Backfill on restore:　No 10:51:42　Backup file created on Dec　4, 2001 10:23 　　　by Gary Fisher Natl Institute of Standards & Technology Software Diagnostics & Con 　　　Backup file comment record: 　　　　DI-164 10:51:44　Backup file F:\IMG.001 opened for access. 10:52:01　The destination drive capacity is smaller than that of the 　　　　original source drive. 10:52:12　Restore of drive 2: from F:\IMG.001 　　　　to drive 1: started on Dec　4, 2001 10:52 10:52:12　Partition fixup has been disabled. 10:52:12　Local SafeBack is running on DOS 7.10 　　　Source drive 2: 　　　　Capacity........8759 MB 　　　　Cylinders.......1116 　　　　Heads..........255 　　　Destination drive 1: 　　　　Capacity........3079 MB 　　　　Cylinders.......6256 　　　　Heads..........16 11:02:08　Backup file F:\IMG.002 opened for access. 11:07:09　Restore of drive 2: to drive 1: completed on Dec　4, 2001 11:07 11:07:56　Menu selections: 　　　Function:　　　　　Restore 　　　Direct access:　　　No 　　　Use XBIOS:　　　　Yes 　　　Adjust partitions:　No 　　　Backfill on restore:　No 　　　SafeBack execution ended on Dec　4, 2001 11:07. = = = = Measurement Logs = = = = Sectors Compared 6306048 Sectors Differ 0 Diffs range Source (17938985) has 11632937 more sectors than destination (6306048) Hash after test: 25BF8AF6B2D3E0BD1909C96E368DB27F51C49CBF
Expected Results:	Source disk is unchanged src compares qualified equal to dst, src is truncated on dst truncation is logged
Actual Results:	No anomalies
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. The Institute provides objective, independent, evidence-based knowledge and tools 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.