SCSI toolbox Suite
version 7.2

www.scsitoolbox.com
support 303.972.2072
sales 720.249.2641

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STB Suite Version 7.2 New Features

STB
New Features:

Disk Write/Read added to Buffer Functions
You can now read from the currently selected disk drive into the buffer(s), or write from the buffer(s) to the currently selected disk drive.

In the Buffer function click the **File Functions** button, then specify the starting block and number of blocks to either read or write, then click either Read or Write.
ATA/SATA User Defined Commands –
Added Command Timeout and Data Transfer Length

Specify the Data Direction, the Data Transfer Length according to what ATA command you are sending. **It is extremely important to set these values correctly**, otherwise the Windows ATA driver may hang and require a power cycle. If a command does not have a data phase you must set the transfer length to zero (0).

Specify the command timeout in seconds – be sure to give the command enough time to complete before timing out. For example, a SLEEP command may take 15 seconds or more for the drive to spin down and complete the command.

STB Bugs Fixed:

1. ATA User Defined Command infinite hang fixed
2. Short DST Test fixed
3. Mode Sense w/o BLOCK DESCRIPTOR fixed
DMM

New Features:

**Test by Percentage (%) of disk**-
Use this feature to specify a test duration to cover a percentage of the disk – for example if you specify 15%, for each drive tested DMM will calculate 15% of the drive’s capacity and will test that amount.

**Remove All Tests**
Click this to clear all tests from a test sequence –
Modify Test Step

Follow these three steps to replace an existing test step with another:

1. In the Test Sequence box select the test step to replace
2. In the Test Setup Tab define your new test step
3. Click the **Modify Current Test Step** button to replace the old test with the new one
New Test Steps

There are nine (9) new test steps available! Details of each new test are below:

1. Clear Log Pages
   a. This test step will clear all drive LOG PAGES by issuing a LOG SELECT command. Note that this test is only valid on SCSI/SAS/FC drives – it will not work with ATA/SATA/USB disks.

2. Save Log Pages
   a. This test step will write all LOG PAGES to each drives log file. Note that this test is only valid on SCSI/SAS/FC drives – it will not work with ATA/SATA/USB disks.
3. Delay
   a. Use this test step to insert a delay of a specified number of seconds in a test sequence. The number of seconds to delay is specified on the Advanced Options page as shown below. If you do not specify a delay length it will default to 60 seconds:

4. DST Test
   a. This test step will issue a long Drive Self Test (DST) using the SCSI SEND DIAGNOSTIC command. Note that this test is only valid on SCSI/SAS/FC drives – it will not work with ATA/SATA/USB disks.

5. Streaming Test
   a. This test simulates the functions of a video or audio streaming computer application. It consists of:
      i. transfer size = large random between 64 and 128 blocks
      ii. access method = sequential
      iii. each transfer step = write or read
6. OLTP Test
   a. This test simulates the functions of an online transaction processing computer application. It consists of:
      i. transfer size = random between 4 and 32 blocks
      ii. access method = random
      iii. each transfer step = (read, write )

7. File Server Test
   a. This test simulates the functions of a typical file server computer application. It consists of:
      i. transfer size = random between 8 blocks and 128 blocks
      ii. access method = random
      iii. each transfer
         -1 out of 5 = write
         -4 out of 5 = read

8. Web Server Test
   a. This test simulates the functions of a typical web server computer application. It consists of:
      i. transfer size = random between 1 blk and 1024 blks
      ii. access method = random
      iii. each transfer = read

9. Workstation Test
   a. This test simulates the functions of a typical workstation computer application. It consists of:
      i. transfer size = random between 1 and 32 blocks
      ii. access method =
         1. - 8 out of 10 = random
         2 out of 10 = sequential from previous
      iii. each transfer =
         1. 4 out of 5 = read
         2. 1 out of 5 = write
Save Log Page path

Default Log File Path is now saved. To change the path to the DMM log files click on the Advanced Options button.
External program – pass arguments

You can pass command-line arguments to any program that you run using either the External Program” test step or the new “Run External Program” on error – see next item describing this. By default when an external program is called from a DMM test step it will be passed the following arguments on the command line:
HA=n,Target=n,LUN=n,SLOT=n,optional command line arguments
Run an external program upon error
Rescan Busses

You can rescan all busses, adapters on your system to discover new devices that have been attached (hot plugged).

DMM Bugs Fixed:

- none
TMM

New Features:

Remove All Tests
Click this to clear all tests from a test sequence –
Modify Test Step
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Rescan Busses

You can rescan all busses, adapters on your system to discover new devices that have been attached (hot plugged).

Bugs Fixed:

- Device selection fixed to not require opening all LUNs in order to select LUN 0 if the drive only has LUN 0
- Device display corrected to display device in red if any test fails

BAM

New Features:
More ATA command definitions added to Command Phase display

Save CDB and Driver Filters

All CDB and driver filters are now automatically saved and reloaded when you restart BAM.

Device/Bus Reset Control Added

You can now start an instance of the STB Bus Reset Tool from a choice on the BAM top menu. The Bus Reset Tool lets you issue a BUS RESET to any Host Bus Adapter on your system. Use the slider control to select which HBA to reset.

Caution: Issuing a BUS RESET to any HBA or controller that is running Windows system or mounted volumes may cause Windows to hang or crash.

Bugs Fixed:
- New device discovery method improves finding all connected devices

- **Save** dialog box type changed from “Save” to “Open” – functionality remains the same

- Random crashing during very long captures fixed