SCSI TOOLBOX, LLC

New Features in STB Suite version 8.1
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Bug Fixes and Enhancements

1. **New Aladdin SRM** package greatly simplifies the install process. Now only one Aladdin driver is needed for all operating systems and environments (networked, remoted, etc).

2. **Aladdin Admin Control Center (ACC)** gives simple view of key status and gives one point to configure network settings, free stuck licenses, etc.

Simply use your internet browser and point to [http://localhost:1947](http://localhost:1947) to see all STB Keys on your system(s), including networked keys. Here is an example showing a network key on a license server:

![Image of Aladdin ACC interface]

You can see the number of allowed sessions and attached sessions, etc.

3. **Calls to Aladdin HASP unlinked in DTB**
   This allows your DTB applications to run without a HASP key connected as long as no DTB functions are called.

4. **New Device Discovery process**
   Achieves higher accuracy and correlation between Windows Device Manager, STB, DMM, BAM, and DTB device names and views.
5. DMM Seek commands
The SEEK commands have been replaced with Single-Block READ commands to allow SEEK tests to be run on SATA drives.

STB ("Original Mode") new features

1. New SATA Commands
2. SATA SMART Self-Test Logs
This command lets you view and save the results of all SMART Self-Tests on a per-drive basis.
3. SATA Features Display and Change

This command will display all of the SATA FEATURES which are available on a selected disk, and will allow any available FEATURES to be changed, set or reset via a simple menu:

If a FEATURE from the SATA specification is enabled in the selected drive it will be highlighted in **BLUE** and the current setting will be displayed showing if the FEATURE is Enabled or Disabled. If there is a value associated with a given FEATURE that value will also be displayed.
You can change any FEATURE setting by clicking on the setting you desire. When you do this the FEATURE color will change to RED indicating that you have modified the setting but have not yet saved the change.

To save the change you must click the “Make All Changes” button. Once the changes have been written to the drive they will be re-read and displayed.

If your selected drive does not support any FEATURES the non-supported FEATURES will be displayed in a BLACK font. Which FEATURES are supported or not is up to the drive Vendor and is not changeable.
4. New SATA Tests
Several new SATA-Specific tests have been added:

5. Execute SMART Self-Test
This test will let you run any of the various types of SATA SMART Self-Tests. As shown – first select the drive you want to run the Self-Test on.
The approximate times that each of the different types of self tests will take to complete will be displayed.
Now select which of the available types of Self-Tests you want to run in the “Test Type” area. Once you have selected the type of test click “Start Test” to begin the test process.
As the Self-Test runs the start time will be displayed in the Results window and the Self Test Progress bar will increment.
Once the test has completed the results will be filled in to the Results window:

You may view the results of all self-tests which have run on a given drive by using the
6. **SATA Drive Confidence Test #1 (Quick QC Test)**

This new test will execute a series of test steps to give a quick idea of drive health and functionality. Each test step which will be run is displayed in the Test Description area. As the test runs each test step will indicate whether it passed or failed, and detailed results will be displayed in the Test Status/Results display area:
The SATA Quick QC Test - (AKA SATA Confidence Test 1) - will run each test shown above.
Select the drive to test. Click “Start Test” to begin the test.

As the test progresses the test steps will change to **GREEN** if they pass or **RED** if they fail. Test details are shown in the Status/Results window.

You may save the test results to a text file. A default file name is created from the drive type and serial number, or you may give any name you want to the file.
7. SATA Drive Confidence Test #2
This test also runs a sequence of test steps like Confidence Test #1 – just longer and more detailed.
SATA Disk Confidence 2 is a longer and more detailed disk test, otherwise it functions the same as Confidence Test 1.
8. SATA Command Sequencer
The SATA Command Sequencer is a quick way to issue any ATA command to a drive, capture and view any data returned, and to build a list or sequence of commands which may be issued/re-issued. You can also use the Command Sequencer to quickly create a Disk Command Compliance test.

There are two ways to send a command. One is to use the “View CDB’s” button to display a list of all available commands. These commands are taken from the same text file which the ATA User Defined
Command feature uses. You can create your own custom command files if you wish – see the documentation on ATA User Defined commands for instructions how.
Using the View CDB’s button will display this window where you may select a command by double-clicking on it. When you double-click a command it will be copied into the Command Entry window.
Once a command is in the **Command Entry** window clicking the **Execute** button will issue the command.

The results of the command (Task Register values) and the number of data bytes specified in the **Options->Results Data Length** window will be displayed in the Command Results window. The command will also be copied into the **Command History** window for later sequencing.
and they will display here...

You may specify how many bytes of returned data are displayed...
In addition to using the View CDB’s button to specify a command you can also simply enter the first few characters of the command name (from your command list) in the Command Entry window. In the example below we enter “E5” and the sequence will look for the first occurrence of “E5” in the command file. When it finds a command that matches it will copy the full command to the Command Entry window.
Now – to send sequences of commands you simple select all commands in the **Command History** window:

Once the commands are selected click the **Execute** button and the sequence of commands will be issued at full system speed.
The selected commands will be executed as quickly as the system can issue them, the results are displayed. Note that the re-issued commands will be added into the History Window.
You may save the list of commands from the Command History window to a file. You can then load the Command History window from that file at any time to re-issue your command sequence.
For a quick command compliance test:
1. Create a customer file of commands
2. execute each command one at a time
3. Save the History file

Now to run a command compliance test simply load your compliance history from the saved file, select all commands in the History Window, and click Execute.
9. SATA Firmware Download
Use this command to download vendor-supplied firmware into a disk drive.
10 – Lock Boot Drive Option

This new options lets you protect your boot drive. Access from the STB Original Options menu:

The new Lock Boot Drive option allows you to lock the drive that your system is booted from. This helps save you from accidental OS damage.
BAM new Features

Save BAM capture data to a Spreadsheet file

This new feature lets you send data to colleagues or coworkers who do not have their own copy of BAM.

This choice will write all of the BAM capture data to a comma-delimited (.csv) text file. This type of file can be opened by any spreadsheet program or you may also open these files with any text editor.
Reading the file is simple – to open it with a spreadsheet program such as Microsoft Excel simply double-click on the file using Explorer:

Here is an example of how Excel will display our BAM data:
DMM (Disk Manufacturing Module) New Features & Tests

Several new test types have been added to DMM in version 8.1

1. SATA-specific test steps
2. SATA SMART test type

This test step will retrieve the SMART data from each drive and has two methods to screen disks.

The first method will check ALL SMART parameters and if ANY are within your specified count of their Thresholds the drive will be failed:

DMM can fail a drive if ANY SMART parameter value approaches its threshold value by your user-defined count.
The second method lets you specify up to five SMART PARAMETER/VALUE pairs and compare either <= or >= to your specified value, and fail the drive accordingly:

DMM can fail a drive if any SMART parameter is either <= or >= your user-defined value.
3. SATA Info Test type
This type of test will retrieve all ATA IDENTIFY, SMART, and SMART Self-Test Log data from each drive and record this information into each drive's log file.

The SATA Info test step will copy all SATA IDENTIFY information and all SMART SelfTest Log results into each tested drive's unique log file.