SCSI TOOLBOX, LLC

New Features in STB Suite version 8.1

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Sales: 720.249.2641

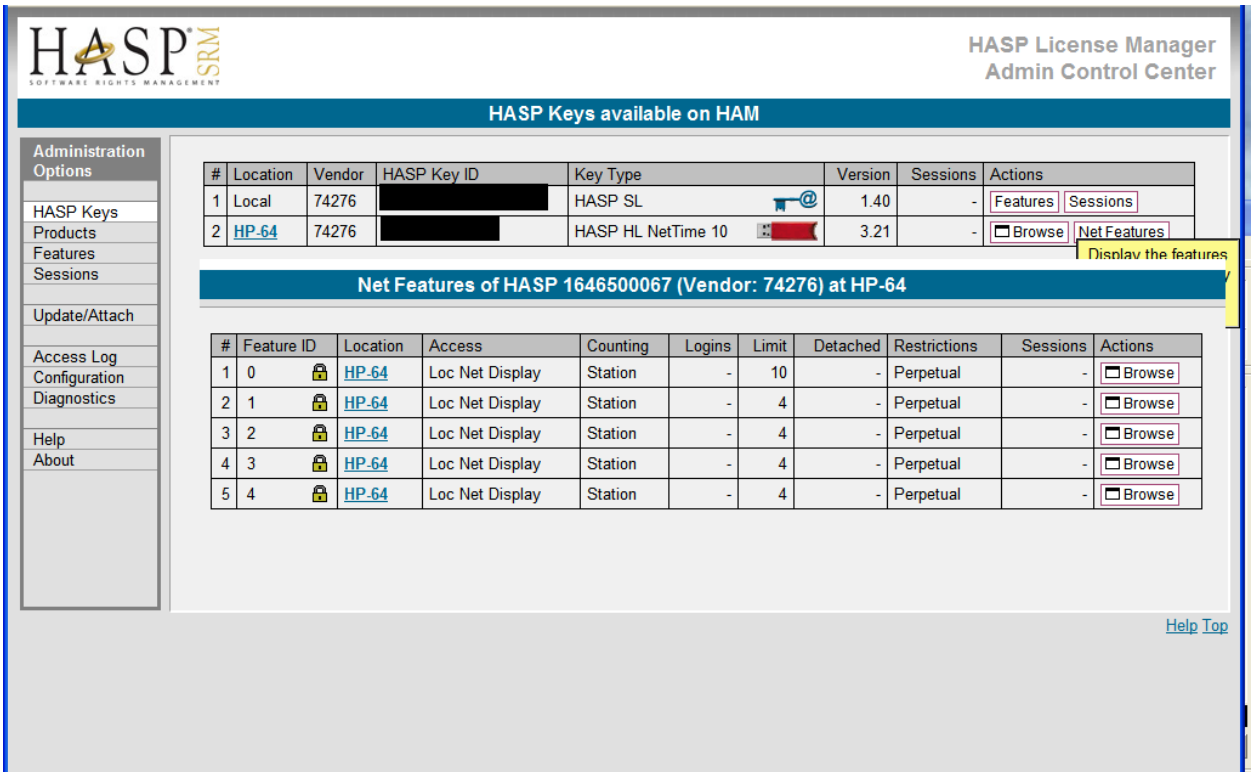
General: 303.972.2072

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 to see all STB Keys on your system(s), including networked keys. Here is an example showing a network key on a license server:



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.

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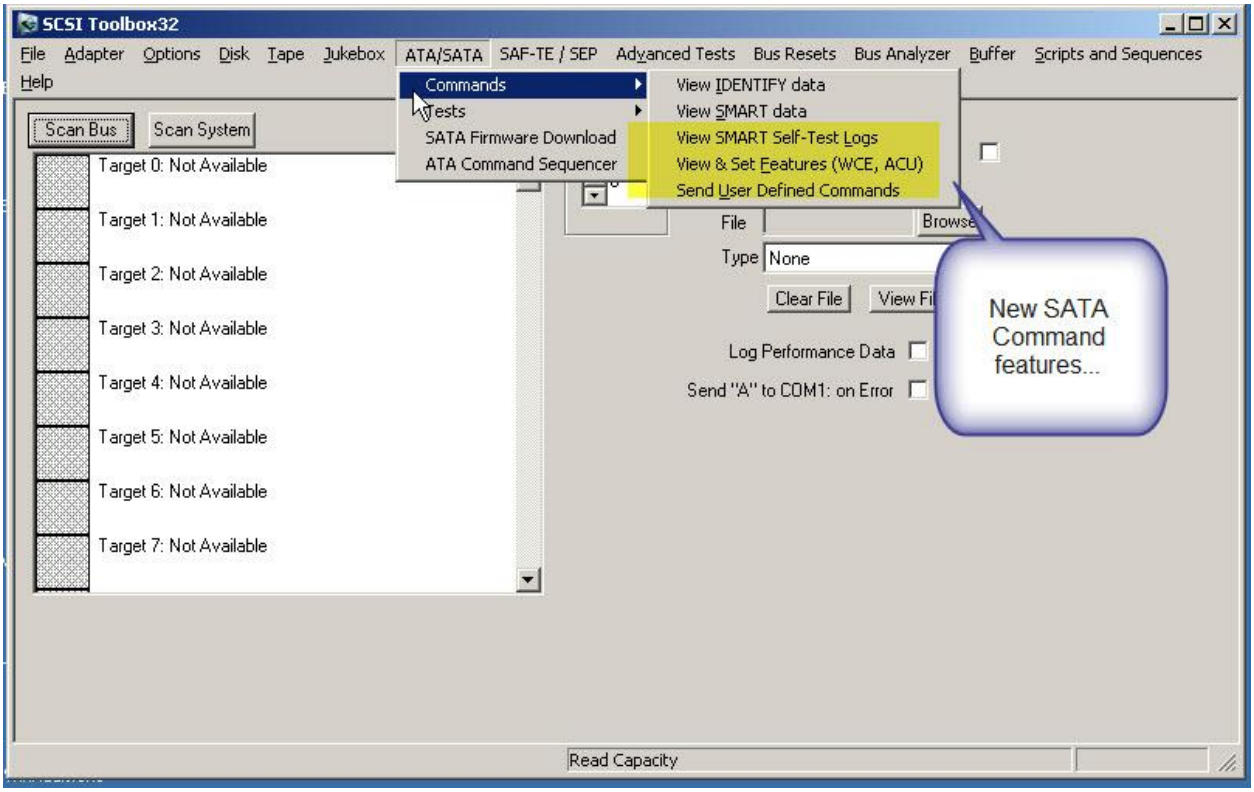
5. DMM Seek commands

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



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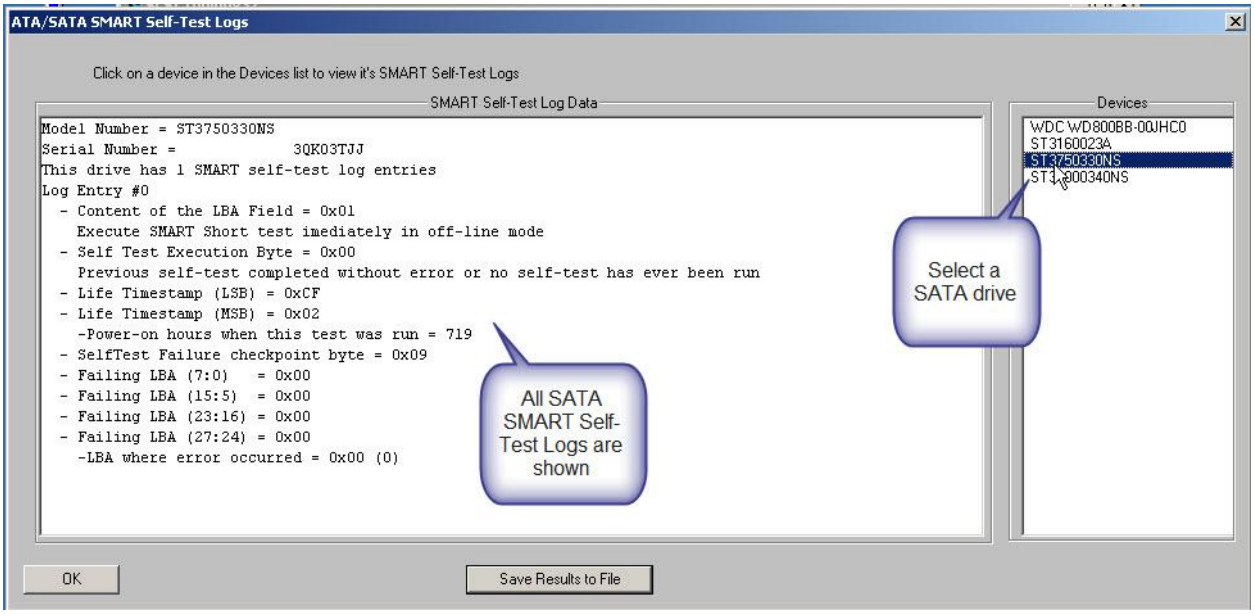
2. SATA SMART Self-Test Logs

This command lets you view and save the results of all SMART Self-Tests on a per-drive basis.



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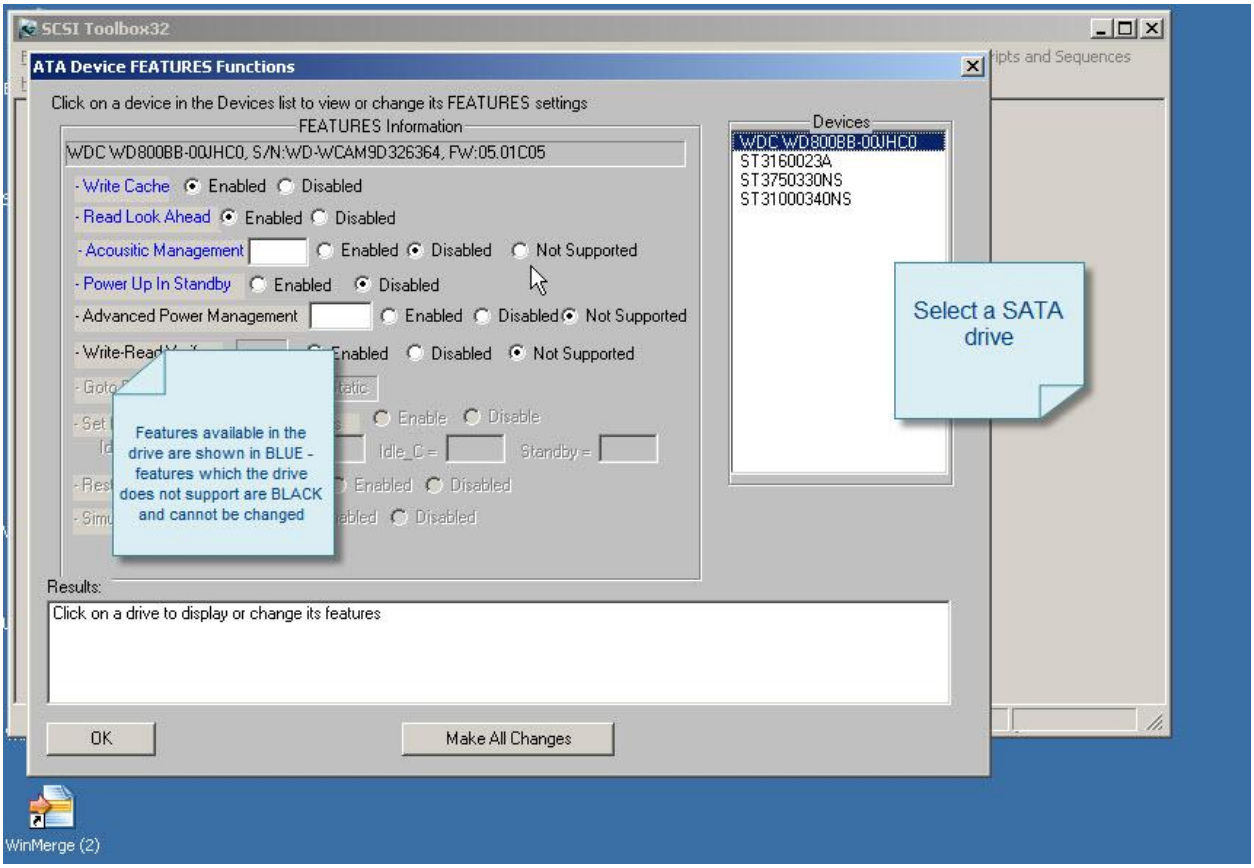
3. SATA Features Display and Change

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.

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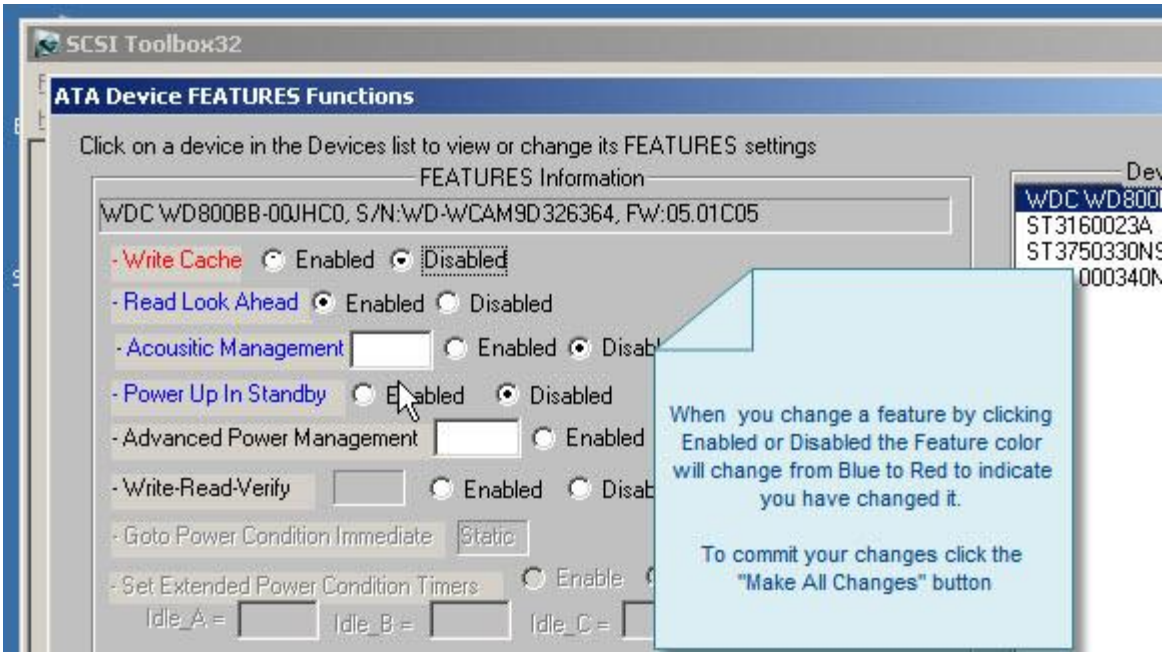
You can change any FEATURE setting by clicking on the setting you desire. When you do this the FEATURE color will change to RED indicating that you have modified the setting but have not yet saved the change.



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.

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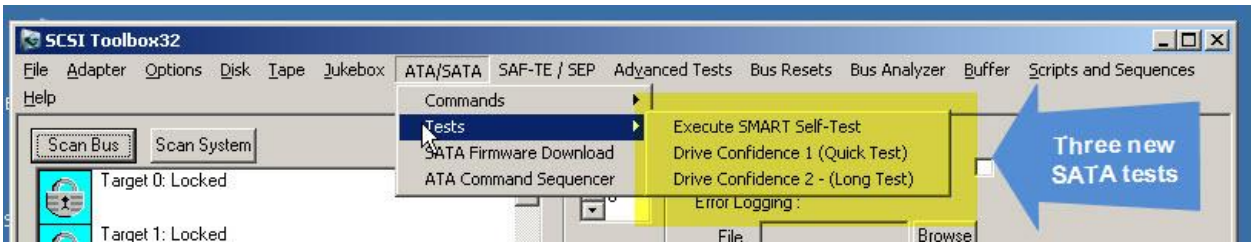
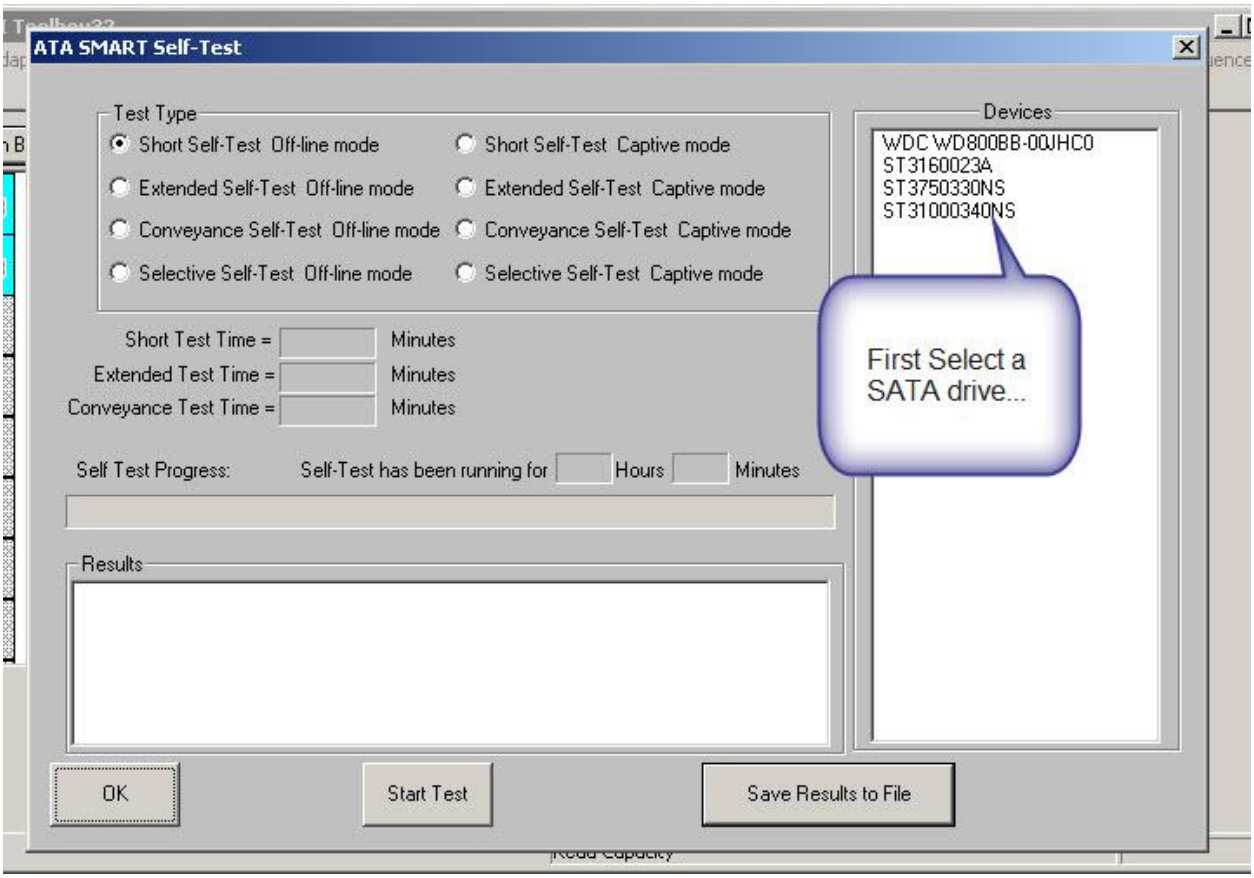
4. New SATA Tests

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



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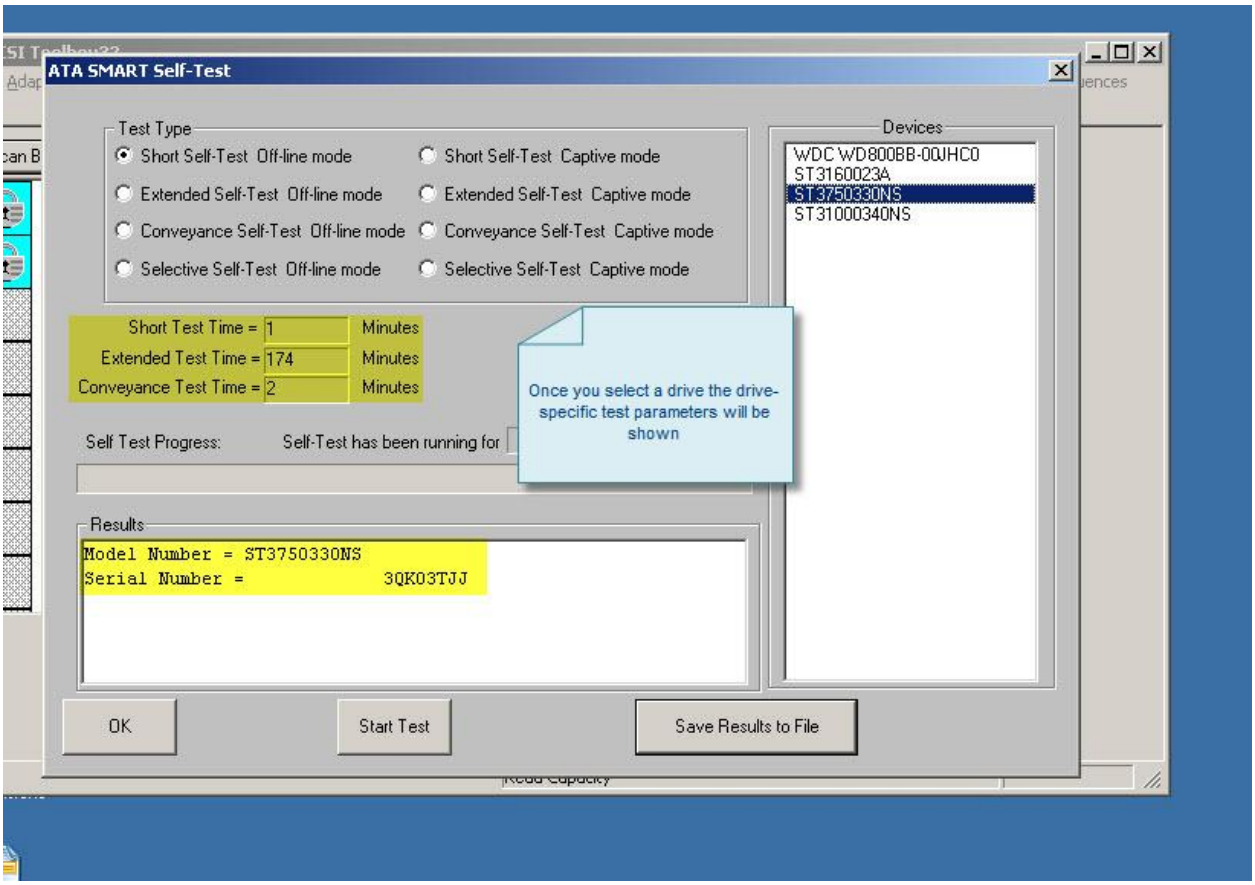
The approximate times that each of the different types of self tests will take to complete will be displayed.



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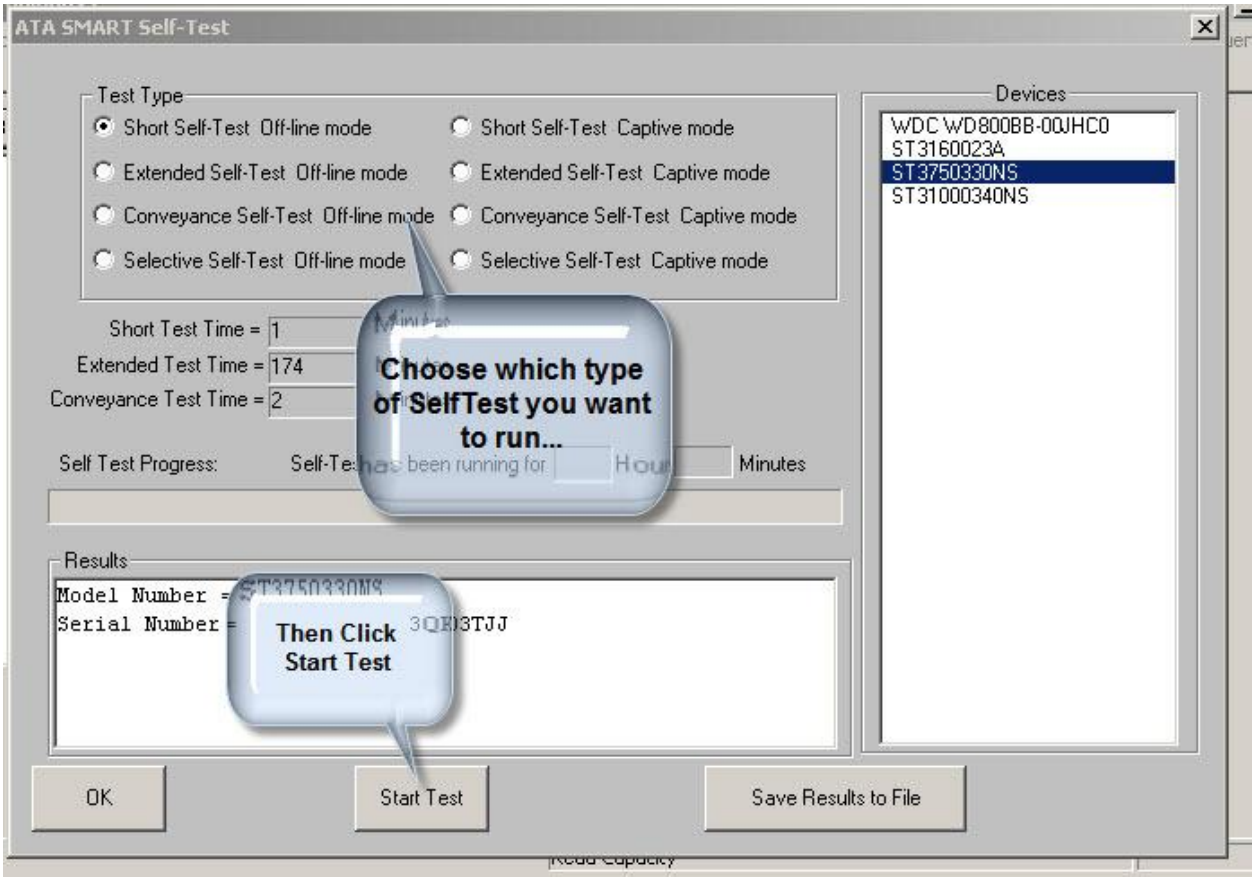
Now select which of the available types of Self-Tests you want to run in the “Test Type” area. Once you have selected the type of test click “Start Test” to begin the test process.



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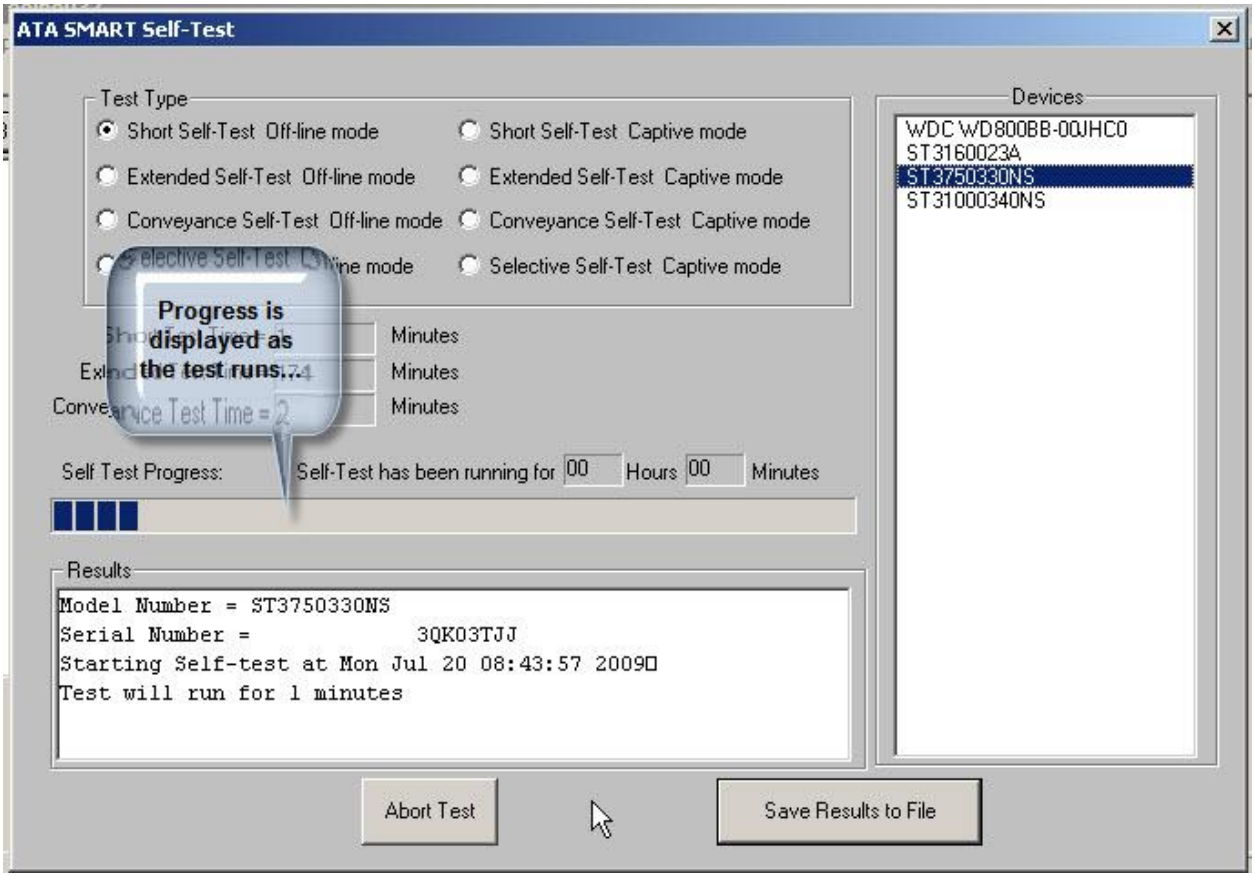
As the Self-Test runs the start time will be displayed in the Results window and the Self Test Progress bar will increment.



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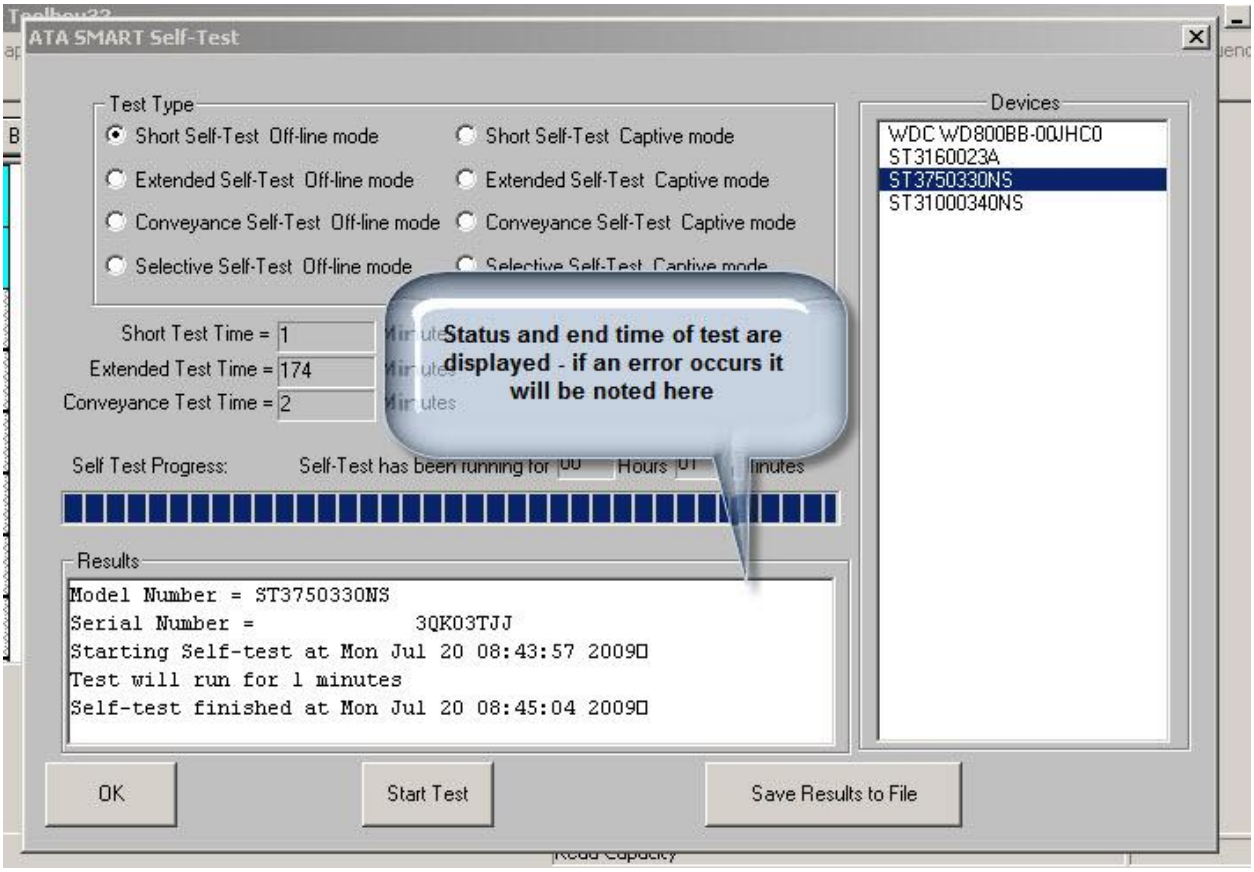
Once the test has completed the results will be filled in to the Results window:



You may view the results of all self-tests which have run on a given drive by using the

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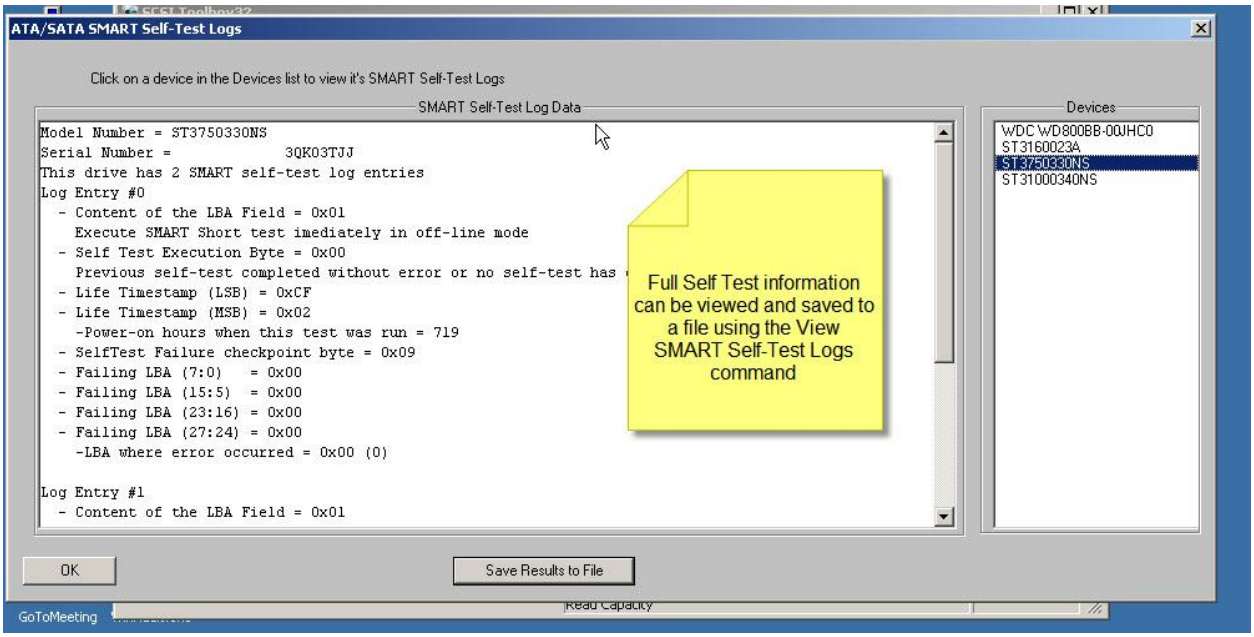
ATA/SATA->Commands->View SMART Self Test Logs
function:



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:

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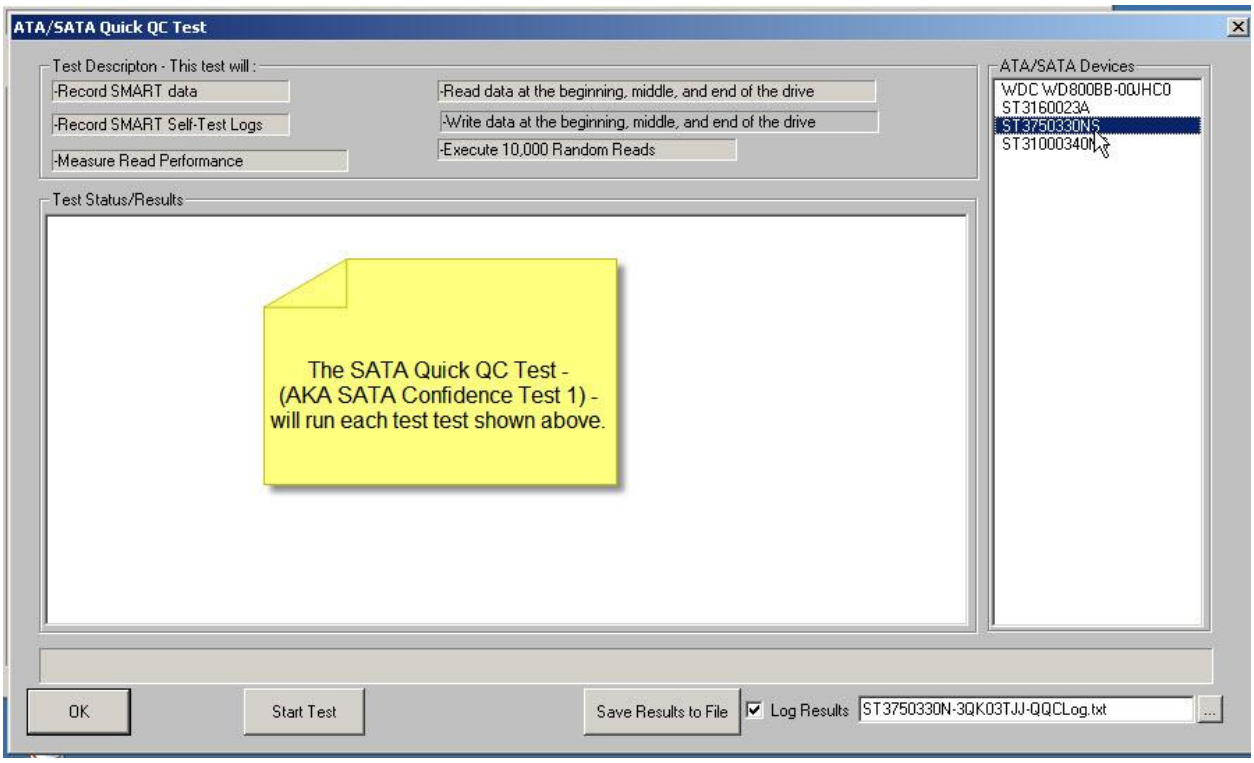

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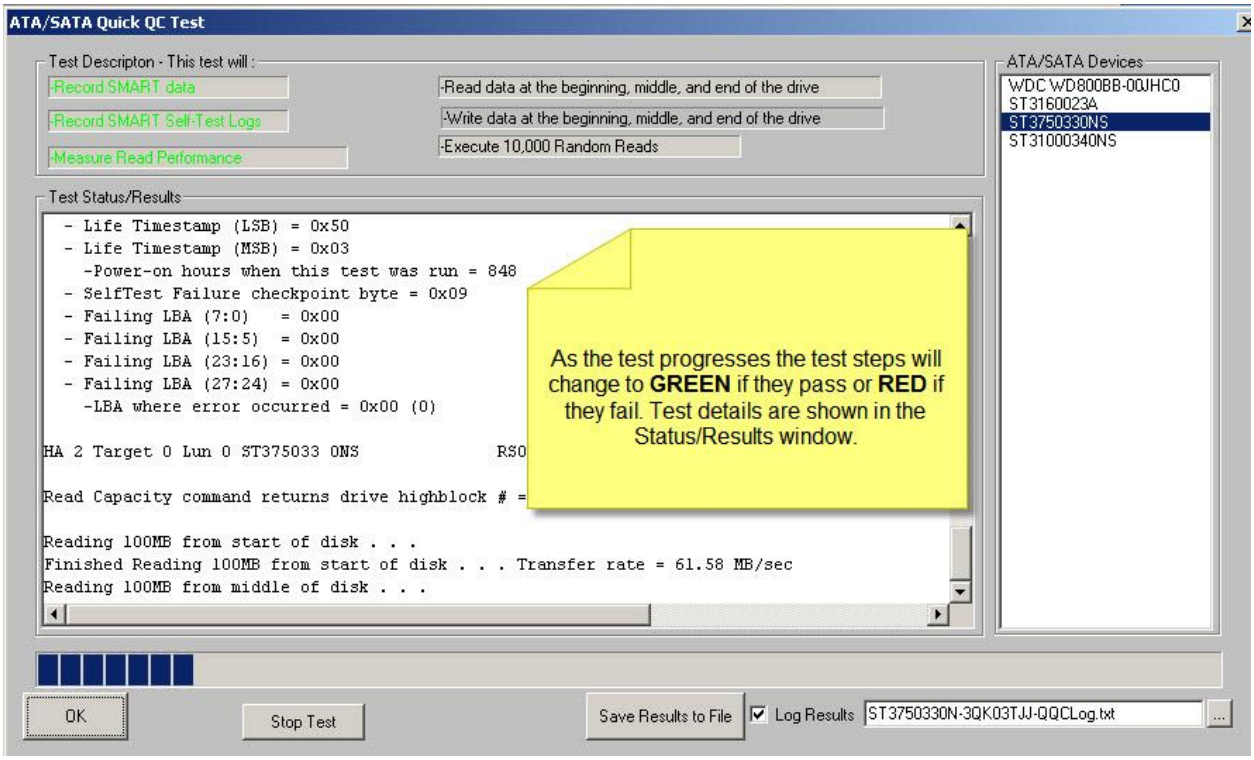
Select the drive to test. Click ***"Start Test***" to begin the test.



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.

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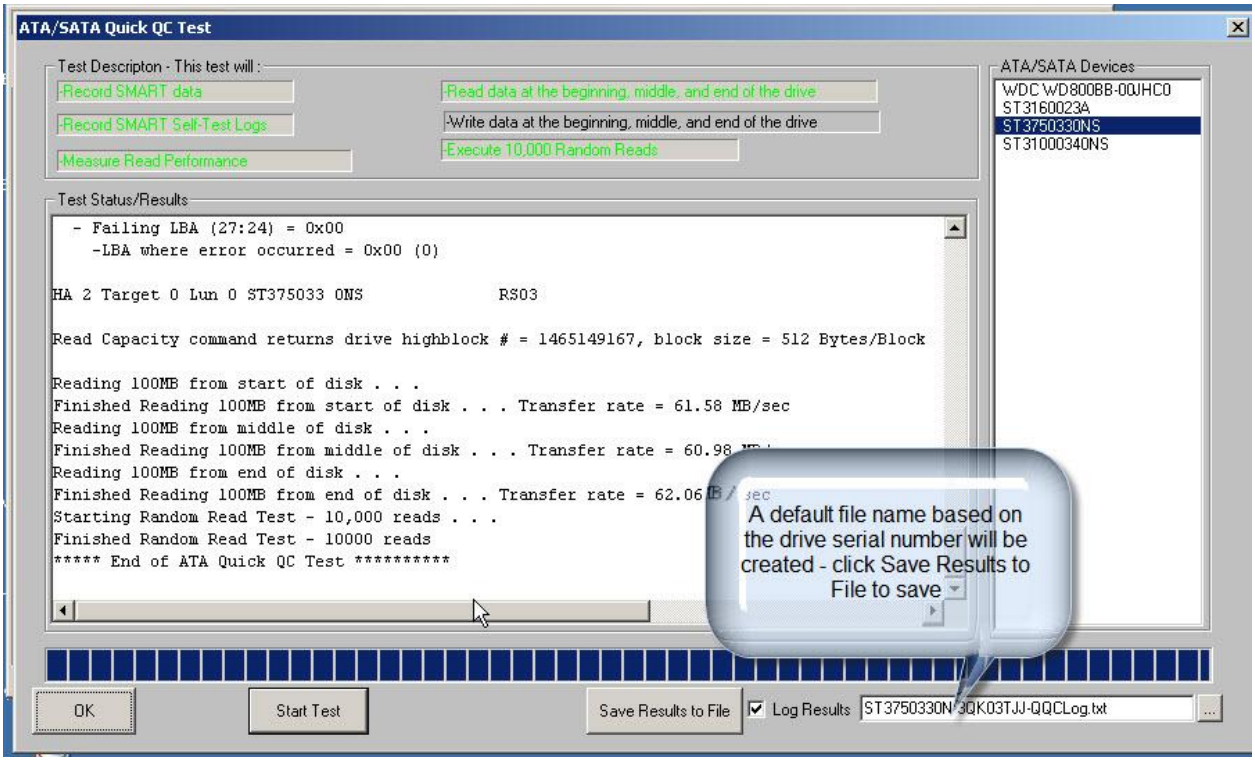

7. SATA Drive Confidence Test #2

This test also runs a sequence of test steps like Confidence Test #1 – just longer and more detailed.

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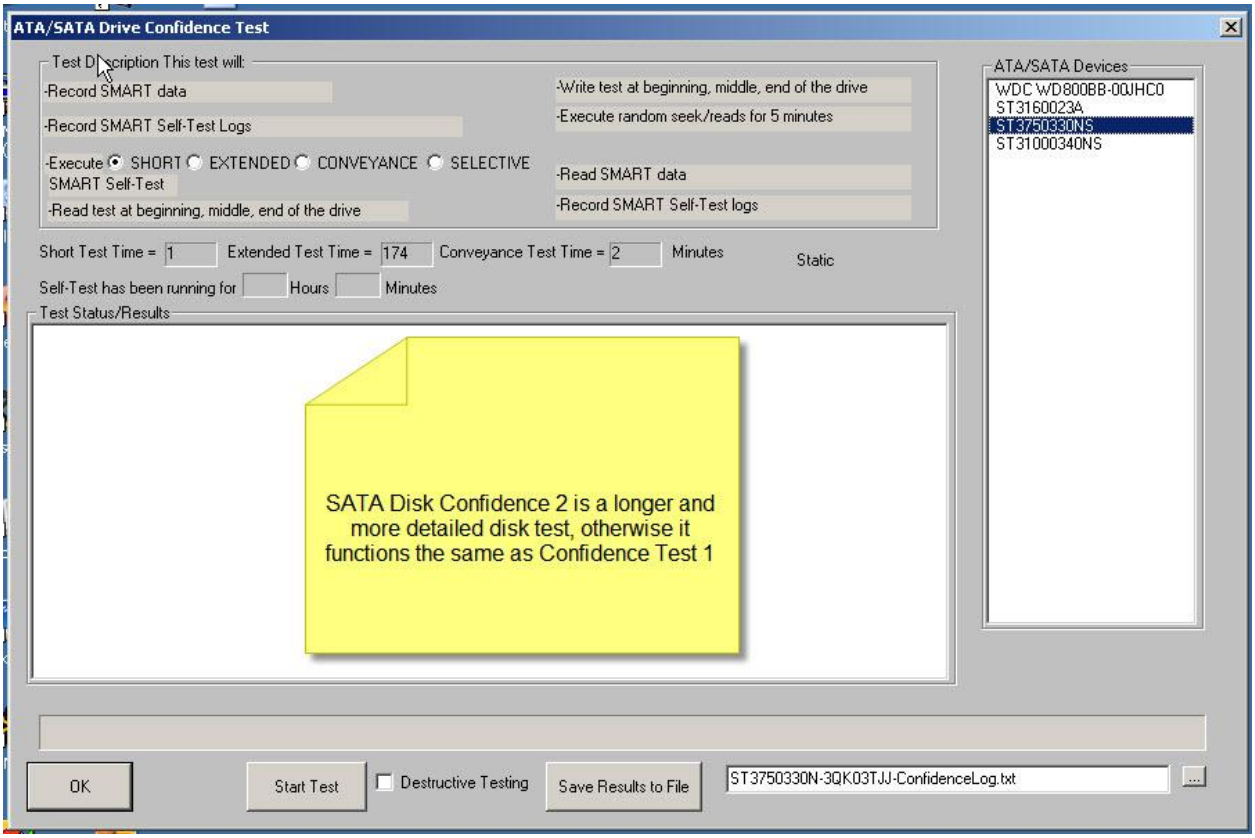

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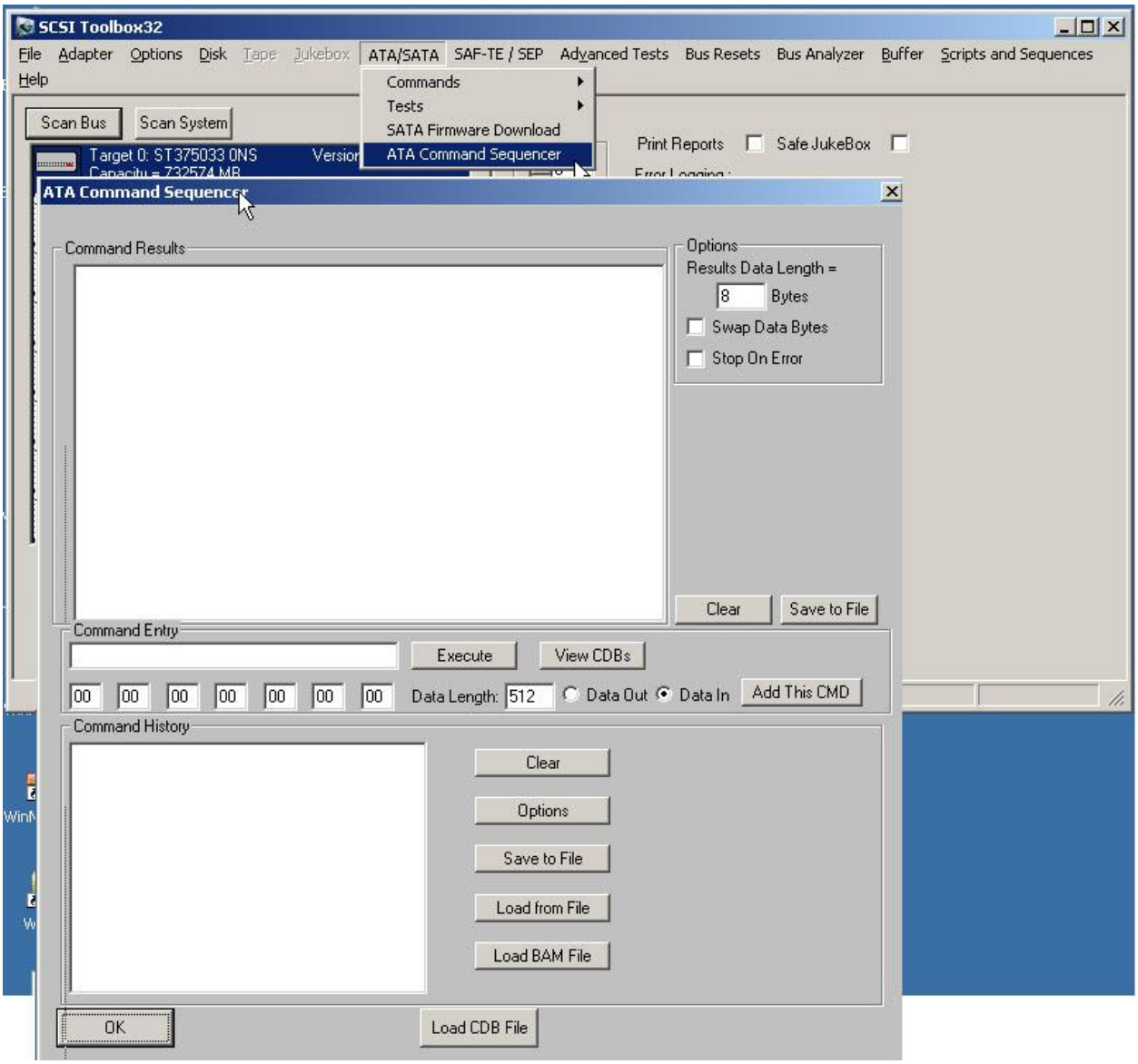
8. SATA Command Sequencer

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

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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.

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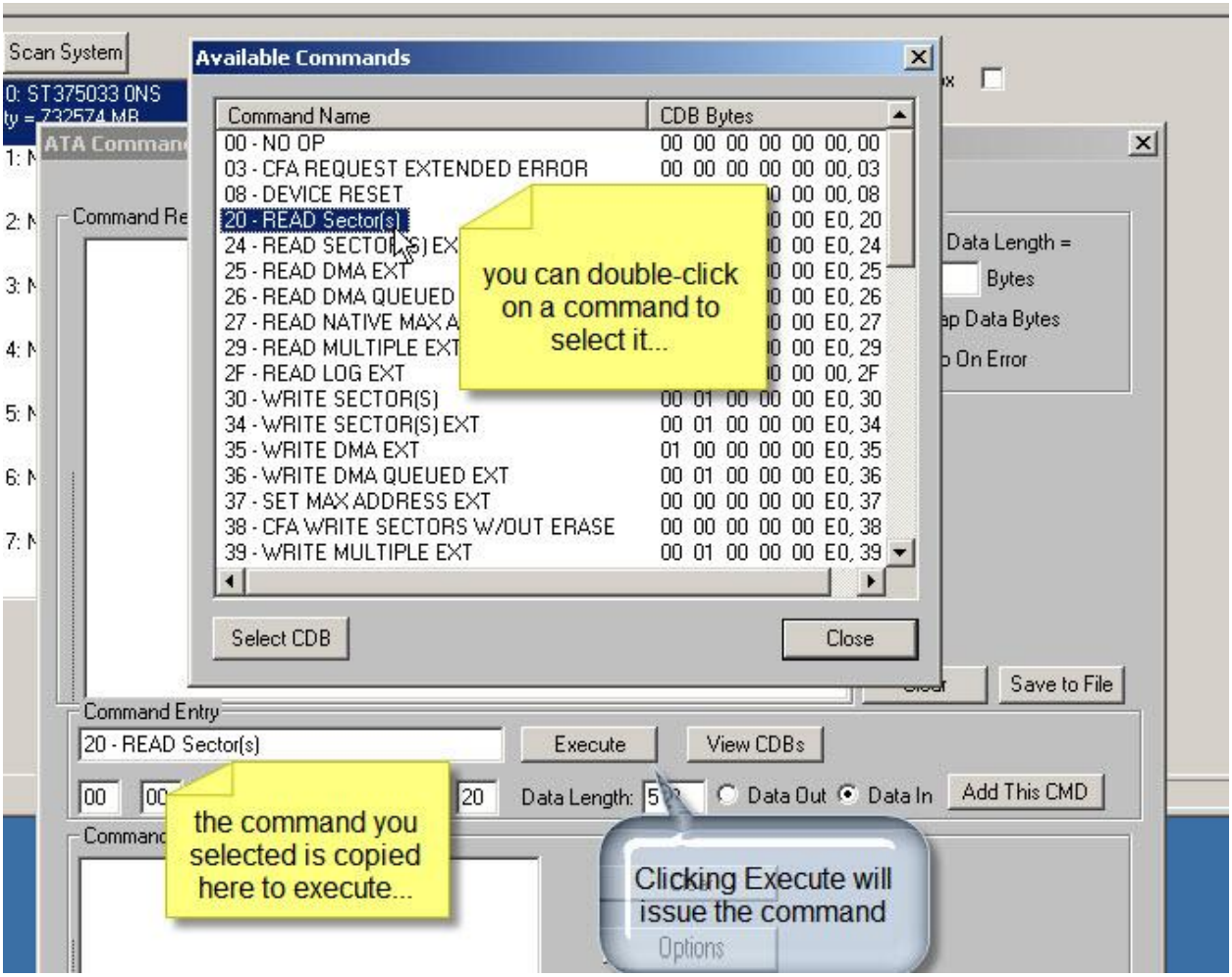
Using the **View CDB's** button will display this window where you may select a command by double-clicking on it. When you double-click a command it will be copied into the **Command Entry** window.



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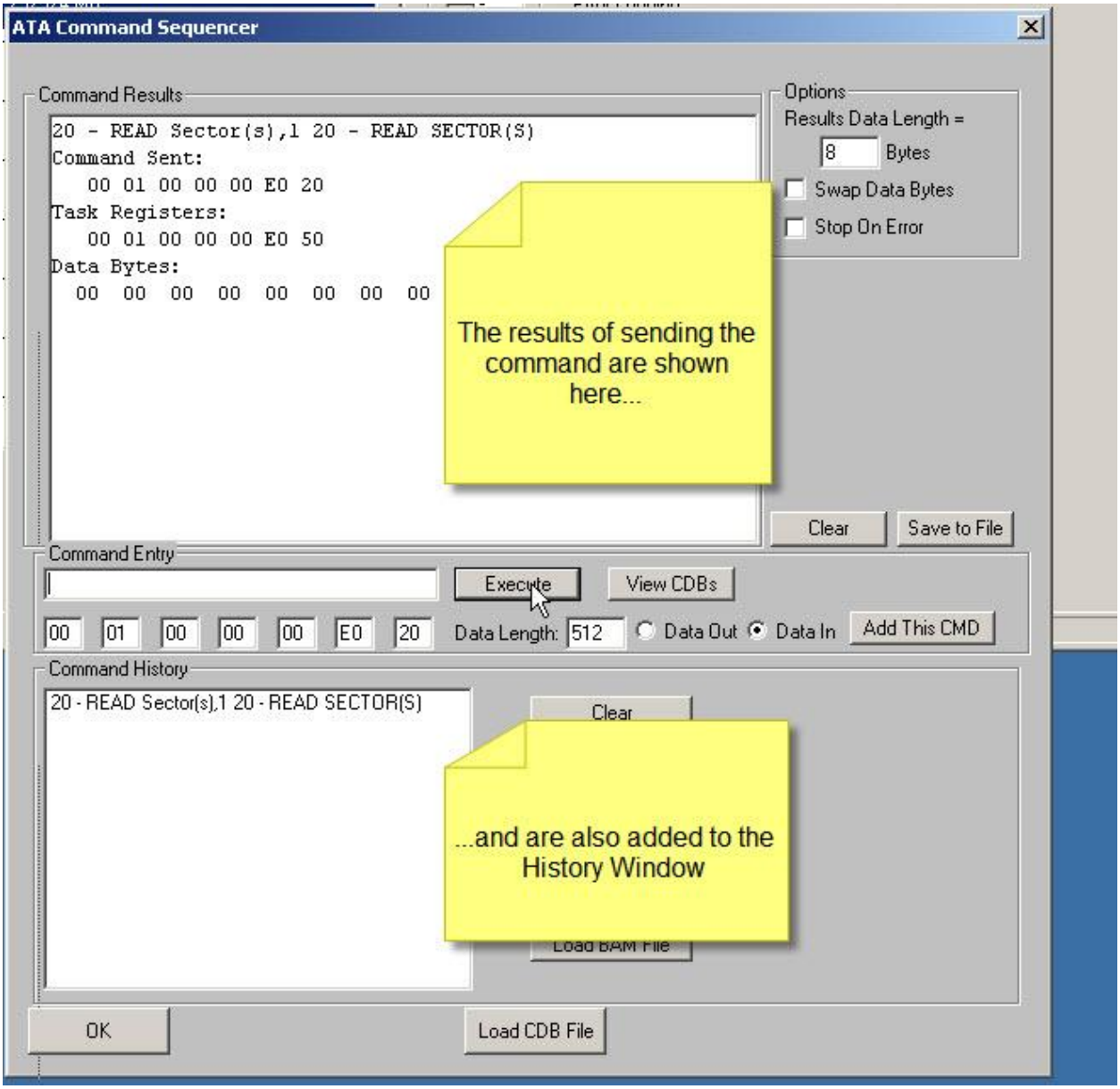
Once a command is in the **Command Entry** window clicking the **Execute** button will issue the command.

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.



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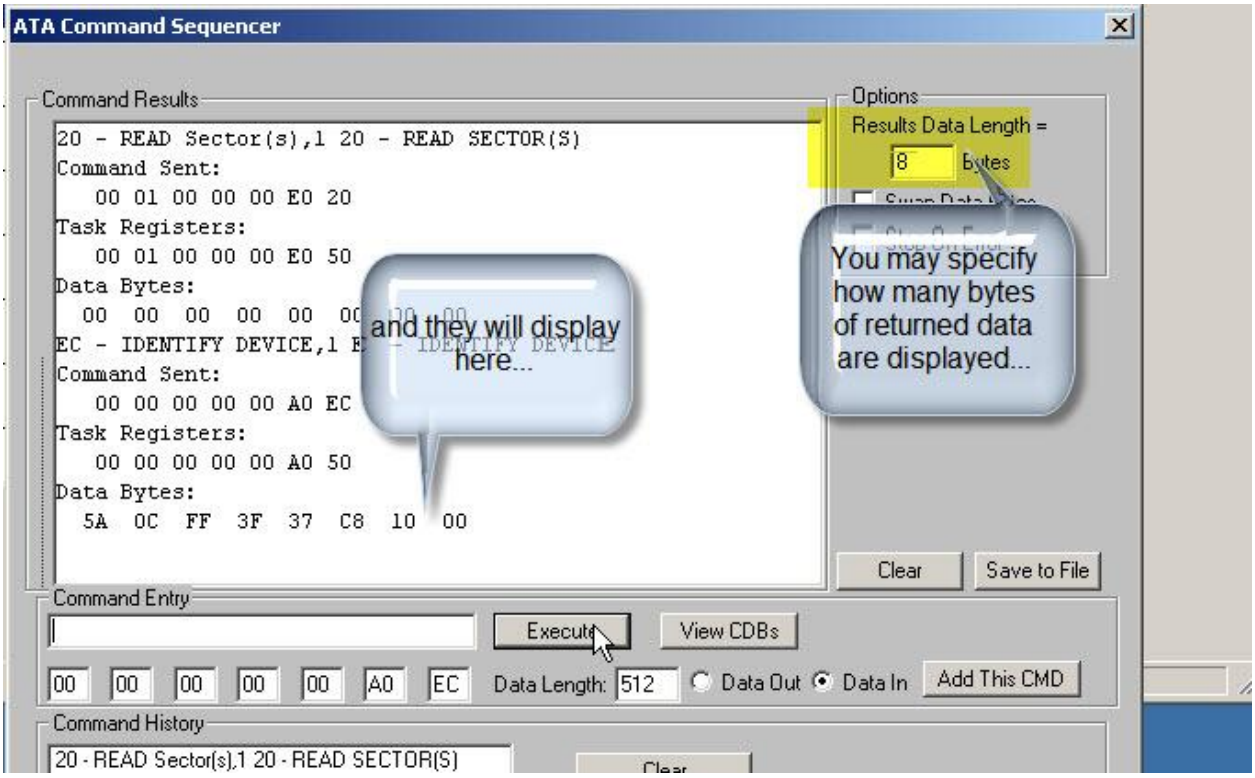

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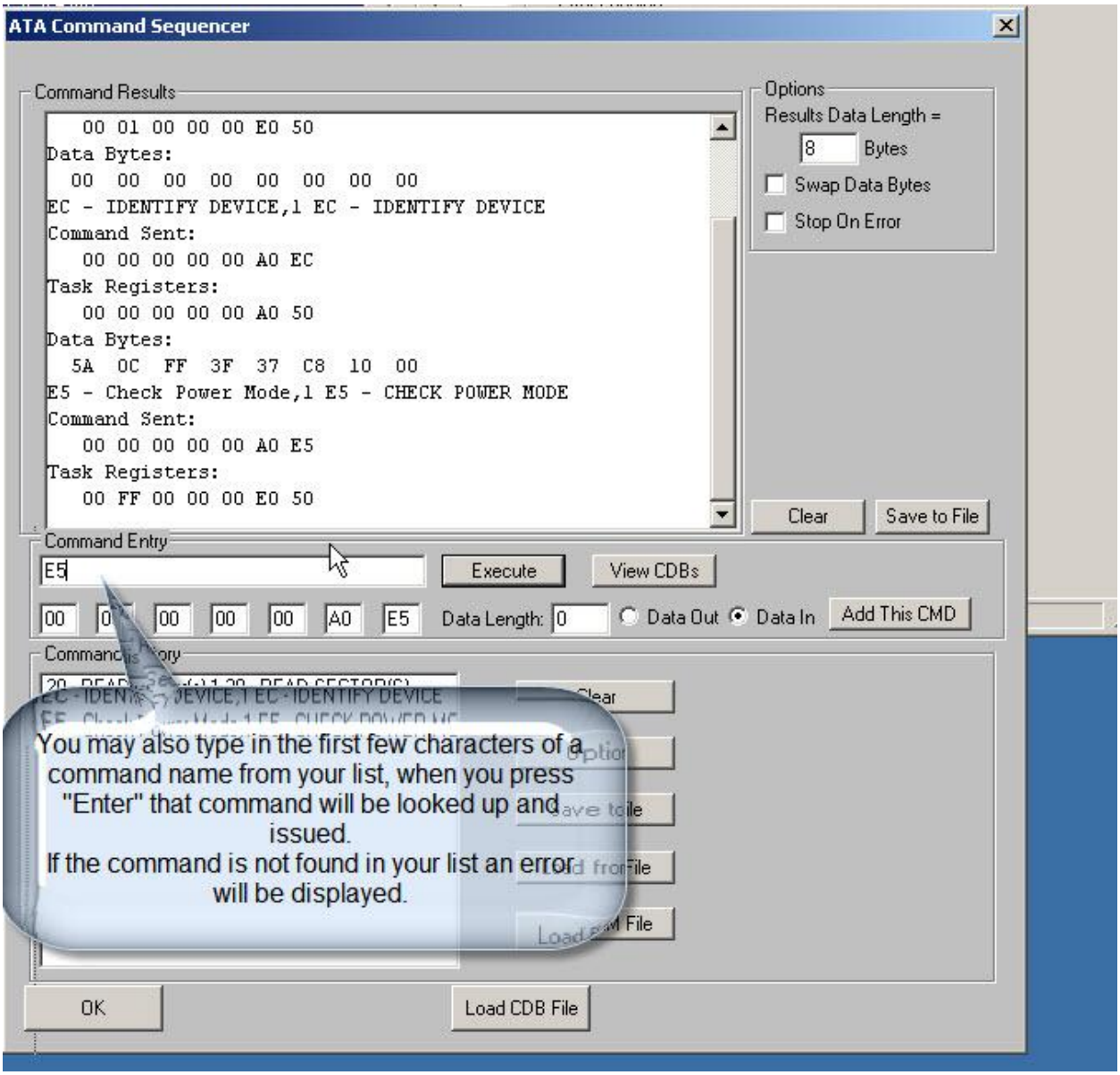
In addition to using the **View CDB's** button to specify a command you can also simply enter the first few characters of the command name (from your command list) in the **Command Entry** window. In the example below we enter "E5" and the sequence will look for the first occurance of "E5" in the command file. When it finds a command that matches it will copy the full command to the **Command Entry** window.



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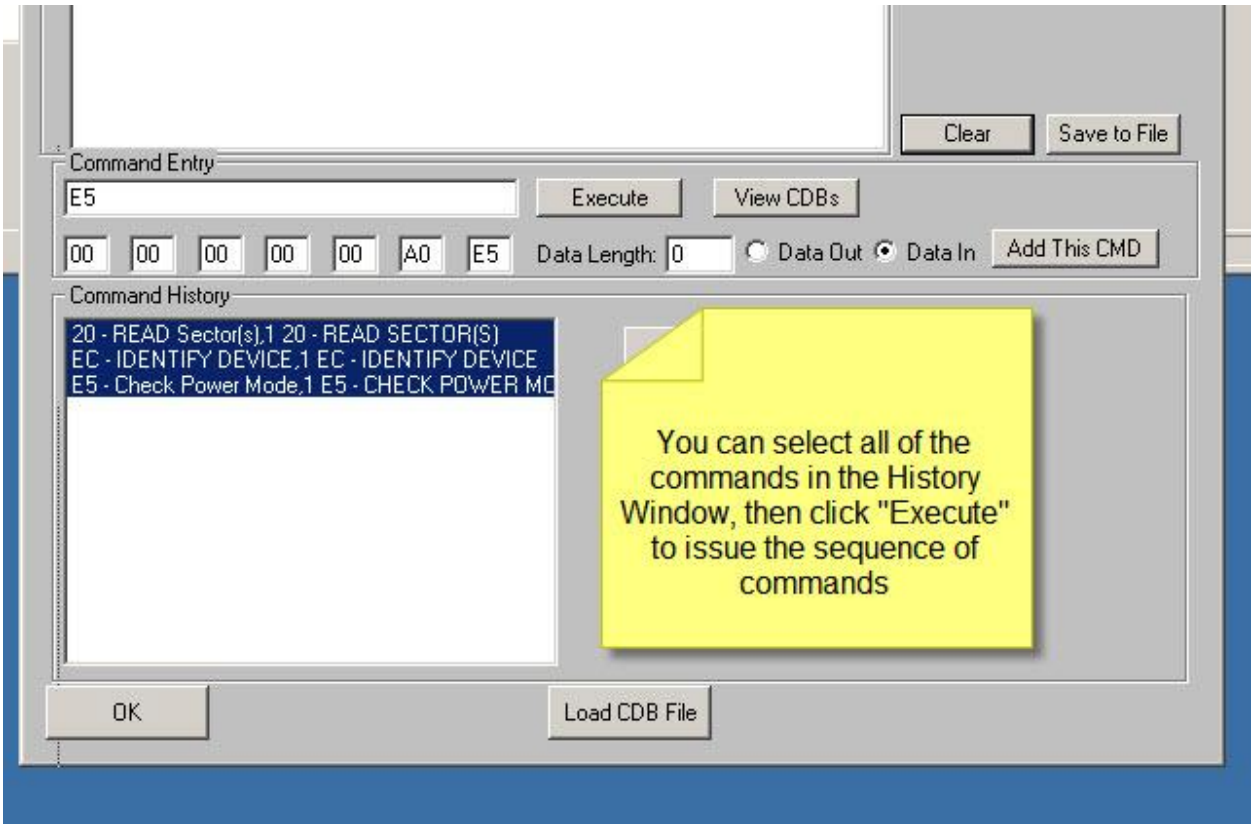
Now – to send sequences of commands you simple select all commands in the **Command History** window:



Once the commands are selected click the **Execute** button and the sequence of commands will be issued at full system speed.

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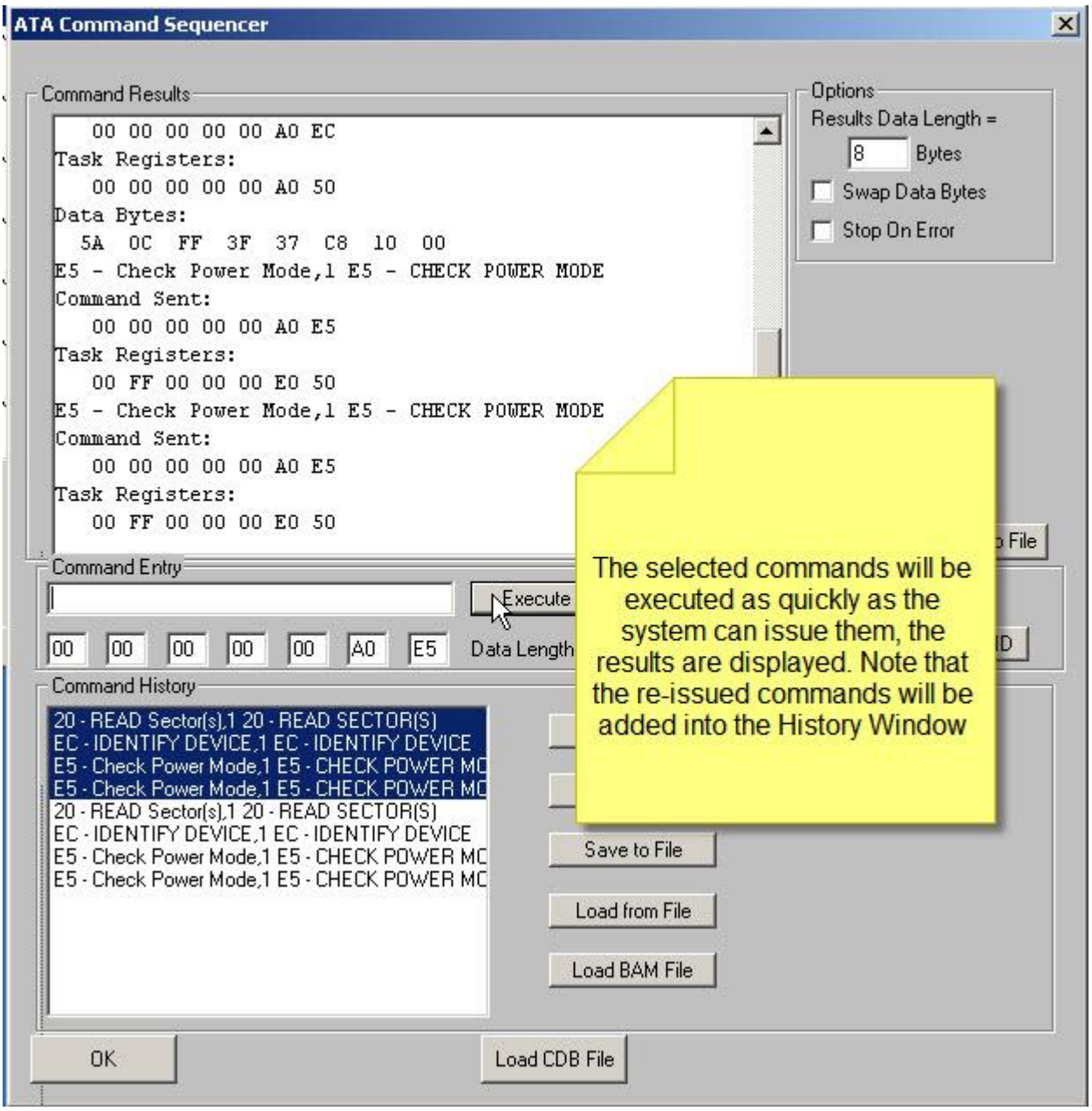

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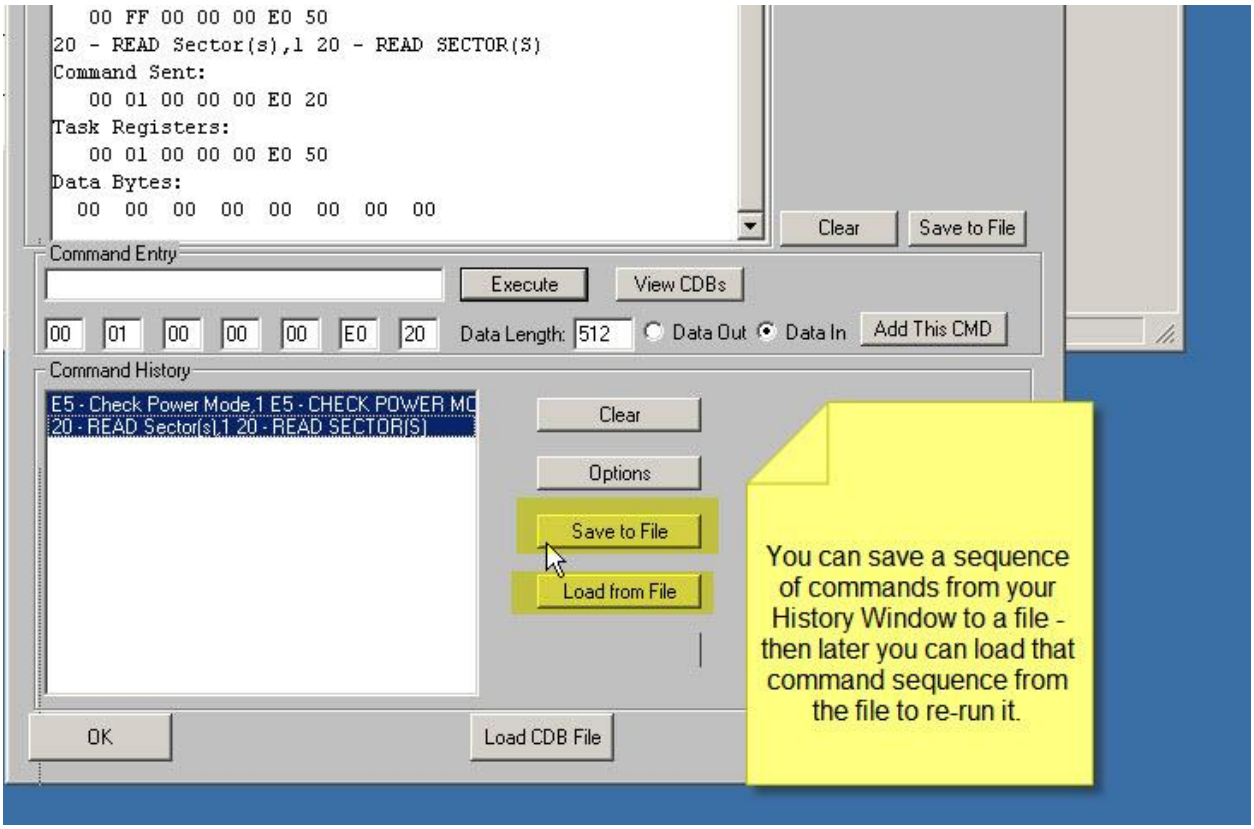
You may **save** the list of commands from the **Command History** window to a file. You can then **load** the **Command History** window from that file at any time to re-issue your command sequence.



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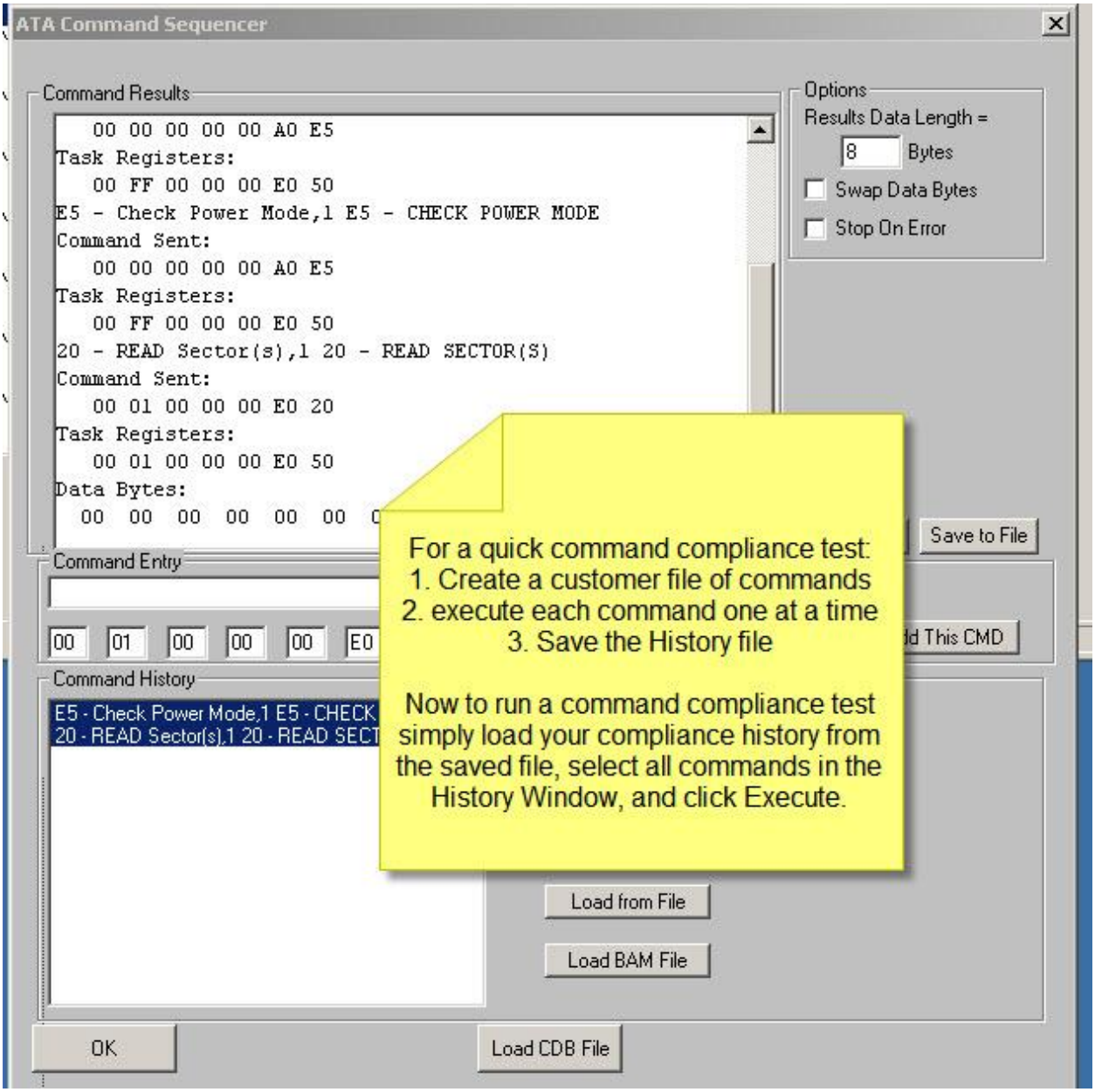

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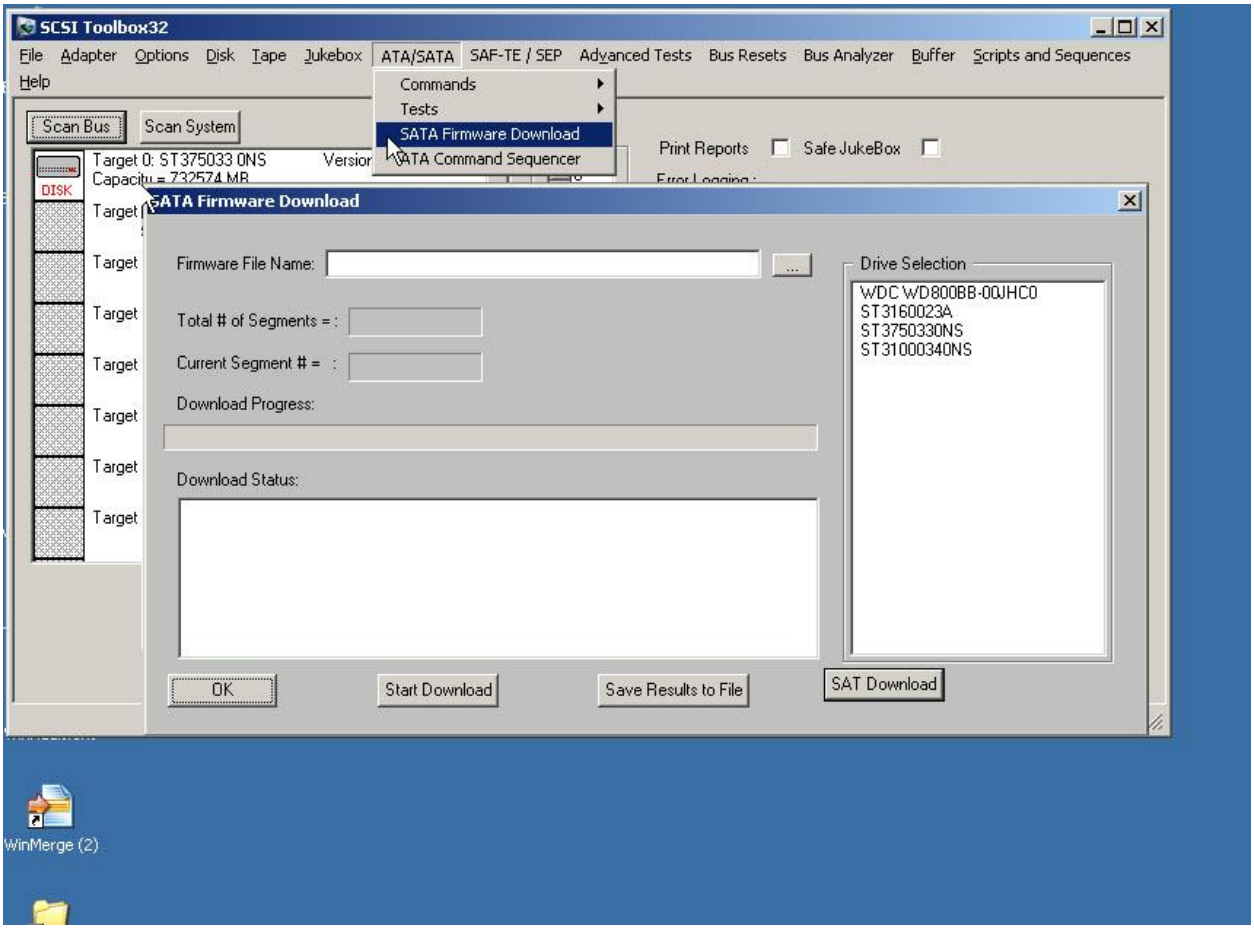
9. SATA Firmware Download

Use this command to download vendor-supplied firmware into a disk drive.



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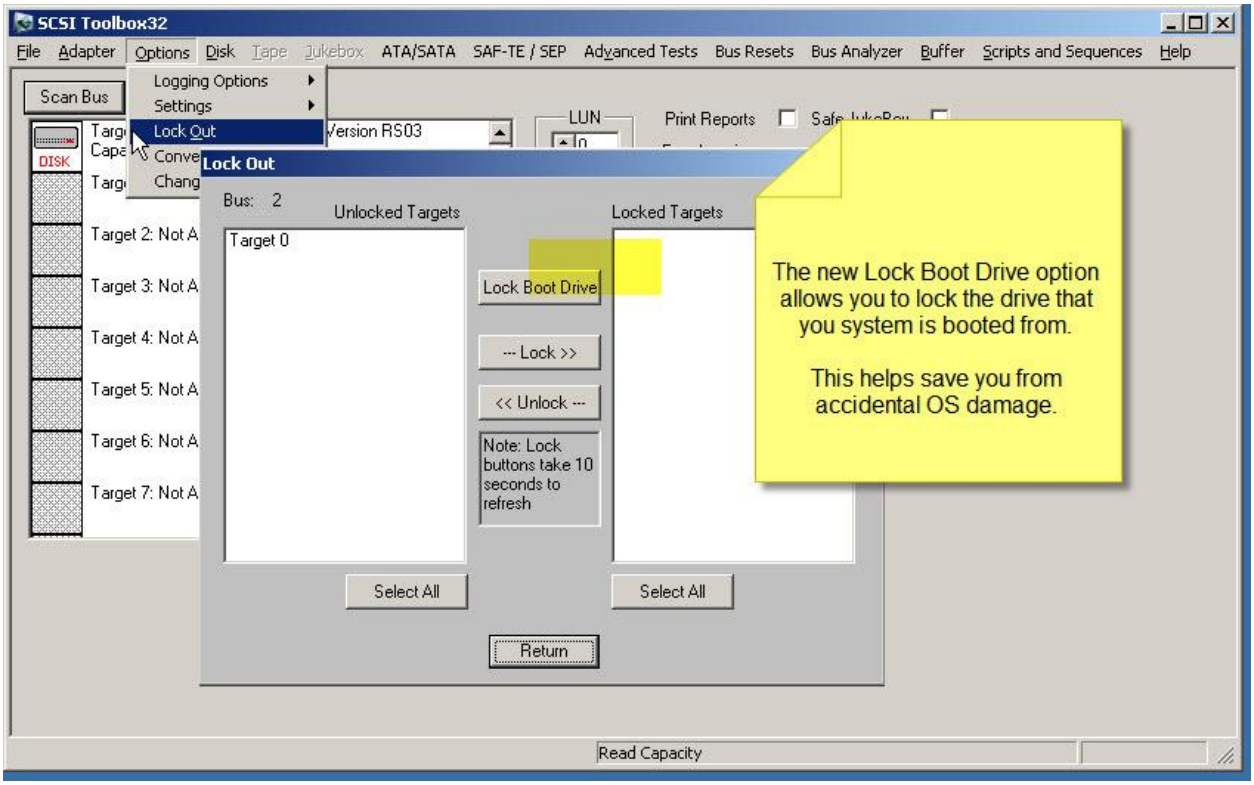
10 – Lock Boot Drive Option

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



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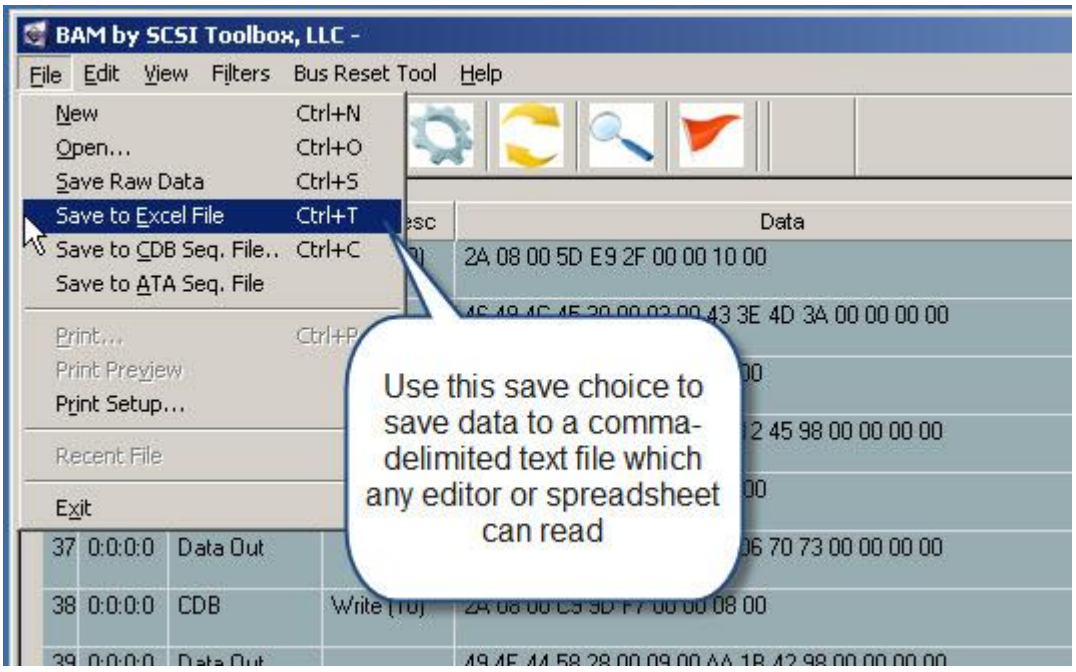
BAM new Features

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.

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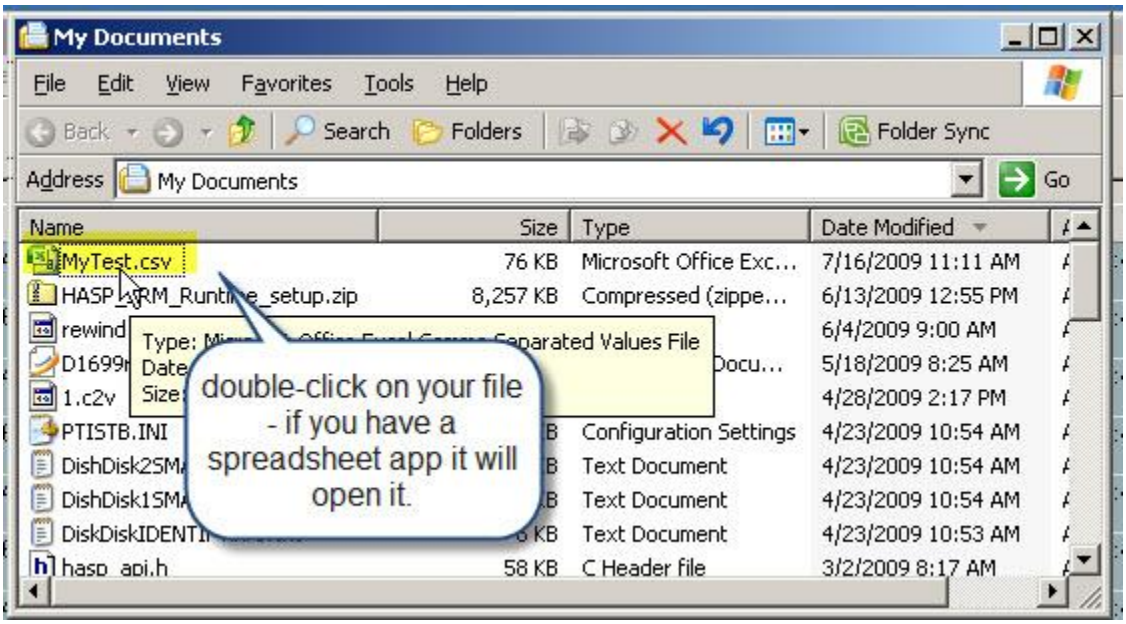
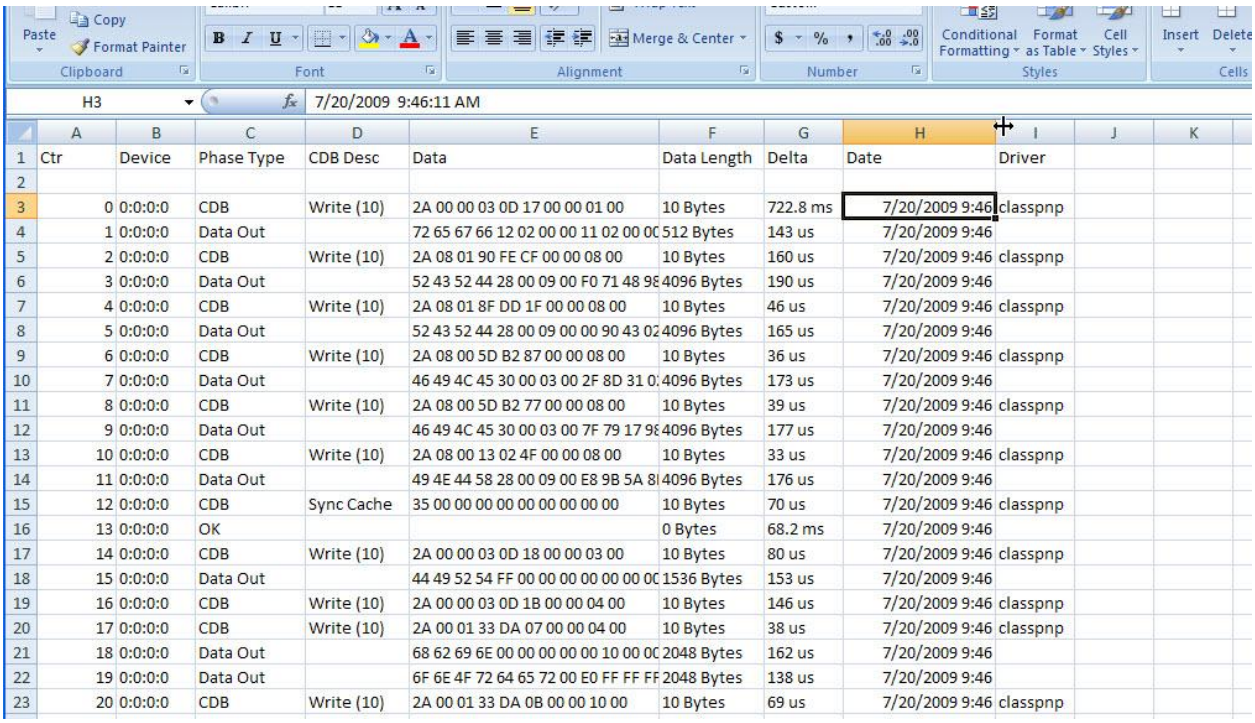
Reading the file is simple – to open it with a spreadsheet program such as Microsoft Excel simply double-click on the file using Explorer:



Here is an example of how Excel will display our BAM data:



H3 7/20/2009 9:46:11 AM

	A	B	C	D	E	F	G	H	I
1	Ctr	Device	Phase Type	CDB Desc	Data	Data Length	Delta	Date	Driver
2									
3	0	0:0:0:0	CDB	Write (10)	2A 00 00 03 0D 17 00 00 01 00	10 Bytes	722.8 ms	7/20/2009 9:46	classpnp
4	1	0:0:0:0	Data Out		72 65 67 66 12 02 00 00 11 02 00 0	512 Bytes	143 us	7/20/2009 9:46	
5	2	0:0:0:0	CDB	Write (10)	2A 08 01 90 FE CF 00 00 08 00	10 Bytes	160 us	7/20/2009 9:46	classpnp
6	3	0:0:0:0	Data Out		52 43 52 44 28 00 09 00 F0 71 48 98	4096 Bytes	190 us	7/20/2009 9:46	
7	4	0:0:0:0	CDB	Write (10)	2A 08 01 8F DD 1F 00 00 08 00	10 Bytes	46 us	7/20/2009 9:46	classpnp
8	5	0:0:0:0	Data Out		52 43 52 44 28 00 09 00 00 90 43 02	4096 Bytes	165 us	7/20/2009 9:46	
9	6	0:0:0:0	CDB	Write (10)	2A 08 00 5D B2 87 00 00 08 00	10 Bytes	36 us	7/20/2009 9:46	classpnp
10	7	0:0:0:0	Data Out		46 49 4C 45 30 00 03 00 2F 8D 31 0	4096 Bytes	173 us	7/20/2009 9:46	
11	8	0:0:0:0	CDB	Write (10)	2A 08 00 5D B2 77 00 00 08 00	10 Bytes	39 us	7/20/2009 9:46	classpnp
12	9	0:0:0:0	Data Out		46 49 4C 45 30 00 03 00 7F 79 17 98	4096 Bytes	177 us	7/20/2009 9:46	
13	10	0:0:0:0	CDB	Write (10)	2A 08 00 13 02 4F 00 00 08 00	10 Bytes	33 us	7/20/2009 9:46	classpnp
14	11	0:0:0:0	Data Out		49 4E 44 58 28 00 09 00 E8 9B 5A 8	4096 Bytes	176 us	7/20/2009 9:46	
15	12	0:0:0:0	CDB	Sync Cache	35 00 00 00 00 00 00 00 00 00	10 Bytes	70 us	7/20/2009 9:46	classpnp
16	13	0:0:0:0	OK			0 Bytes	68.2 ms	7/20/2009 9:46	
17	14	0:0:0:0	CDB	Write (10)	2A 00 00 03 0D 18 00 00 03 00	10 Bytes	80 us	7/20/2009 9:46	classpnp
18	15	0:0:0:0	Data Out		44 49 52 54 FF 00 00 00 00 00 00 0	1536 Bytes	153 us	7/20/2009 9:46	
19	16	0:0:0:0	CDB	Write (10)	2A 00 00 03 0D 1B 00 00 04 00	10 Bytes	146 us	7/20/2009 9:46	classpnp
20	17	0:0:0:0	CDB	Write (10)	2A 00 01 33 DA 07 00 00 04 00	10 Bytes	38 us	7/20/2009 9:46	classpnp
21	18	0:0:0:0	Data Out		68 62 69 6E 00 00 00 00 00 10 00 0	2048 Bytes	162 us	7/20/2009 9:46	
22	19	0:0:0:0	Data Out		6F 6E 4F 72 64 65 72 00 E0 FF FF FF	2048 Bytes	138 us	7/20/2009 9:46	
23	20	0:0:0:0	CDB	Write (10)	2A 00 01 33 DA 0B 00 00 10 00	10 Bytes	69 us	7/20/2009 9:46	classpnp

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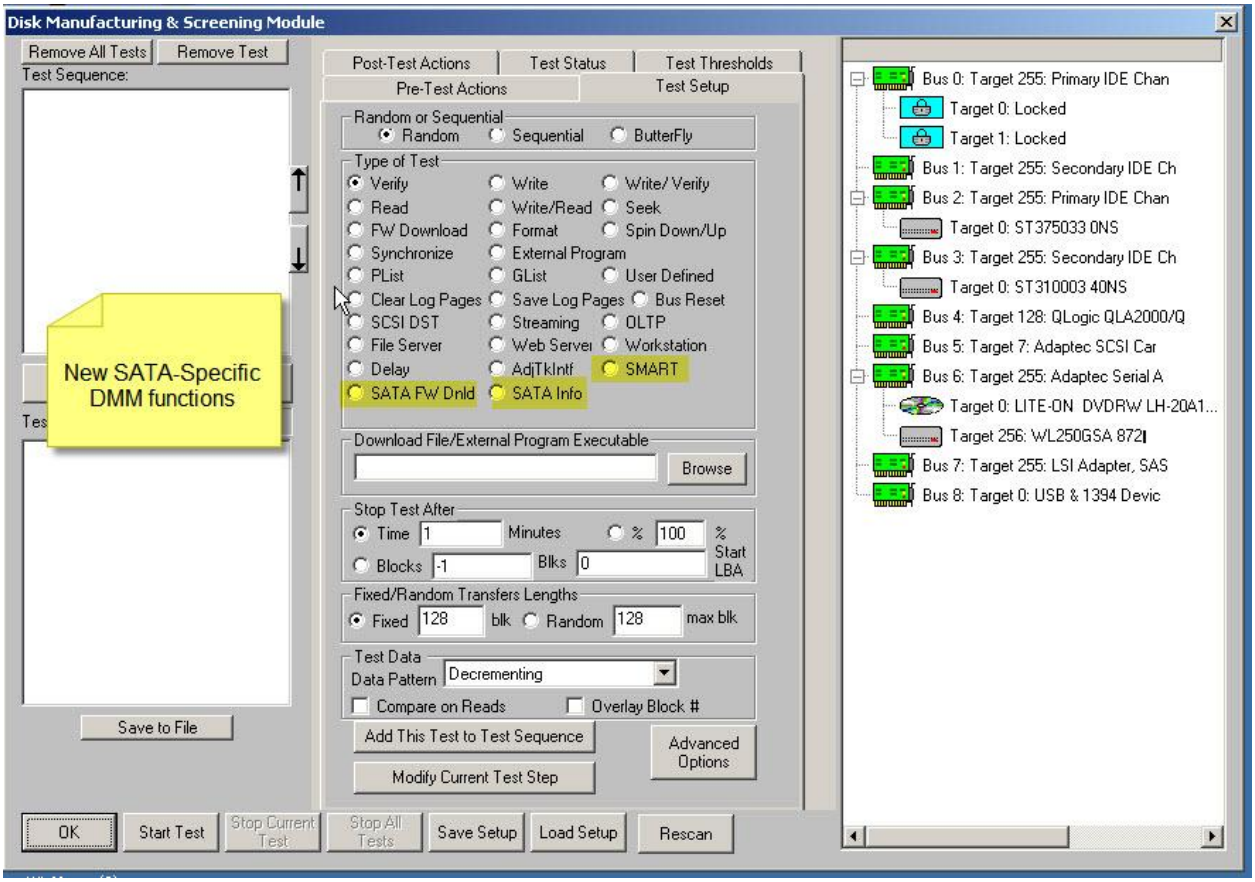
DMM (Disk Manufacturing Module) New Features & Tests

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

1. SATA-specific test steps



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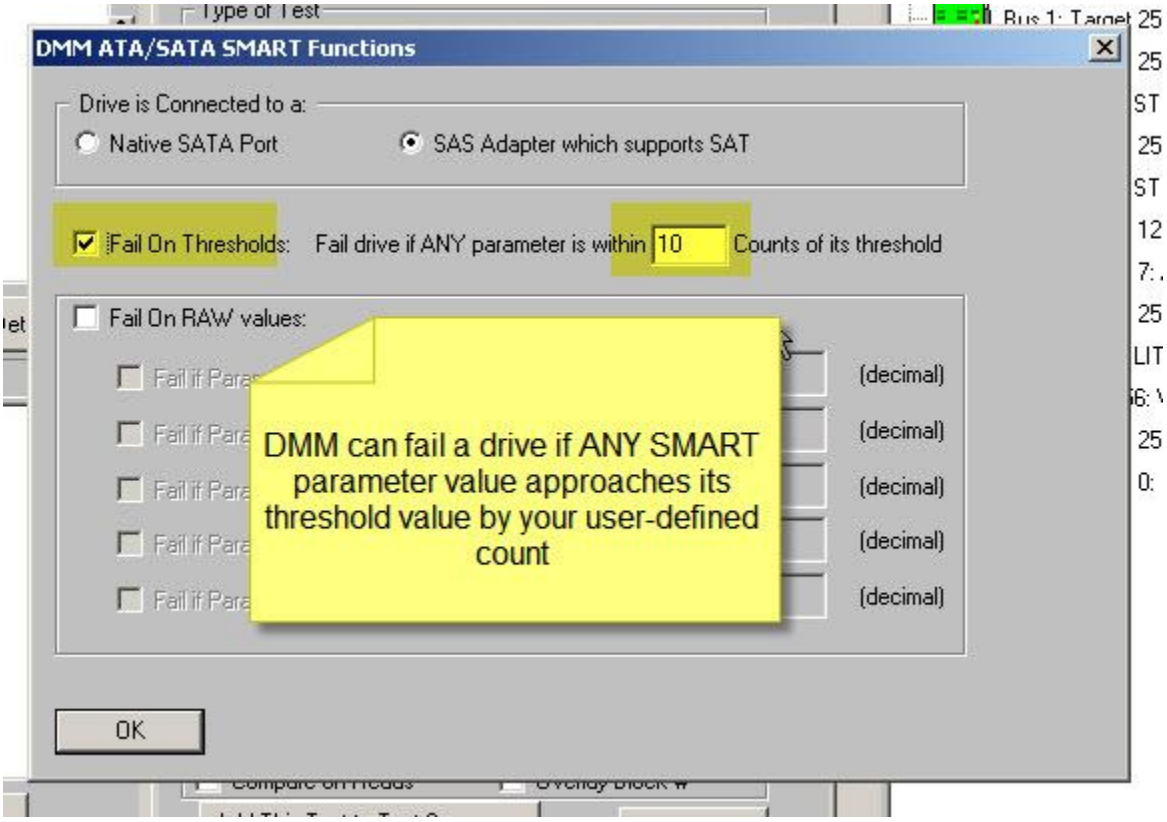
2. SATA SMART test type

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:



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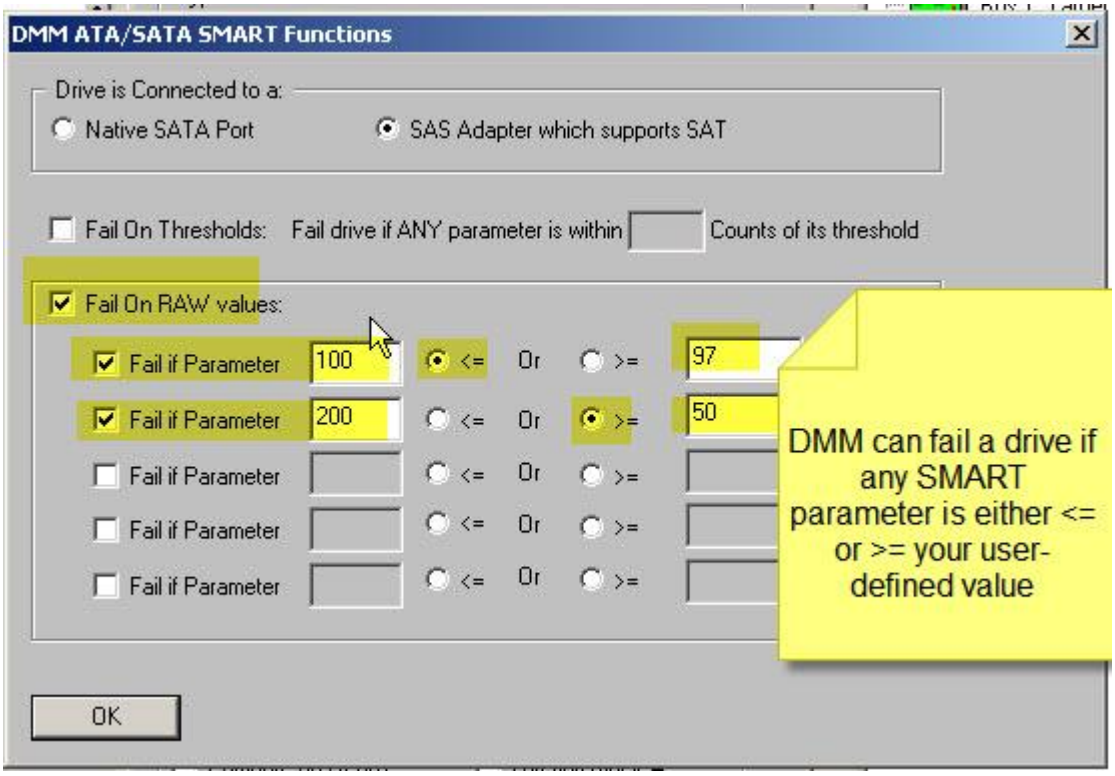
The second method lets you specify up to five SMART PARAMETER/VALUE pairs and compare either <= or >= to your specified value, and fail the drive accordingly:



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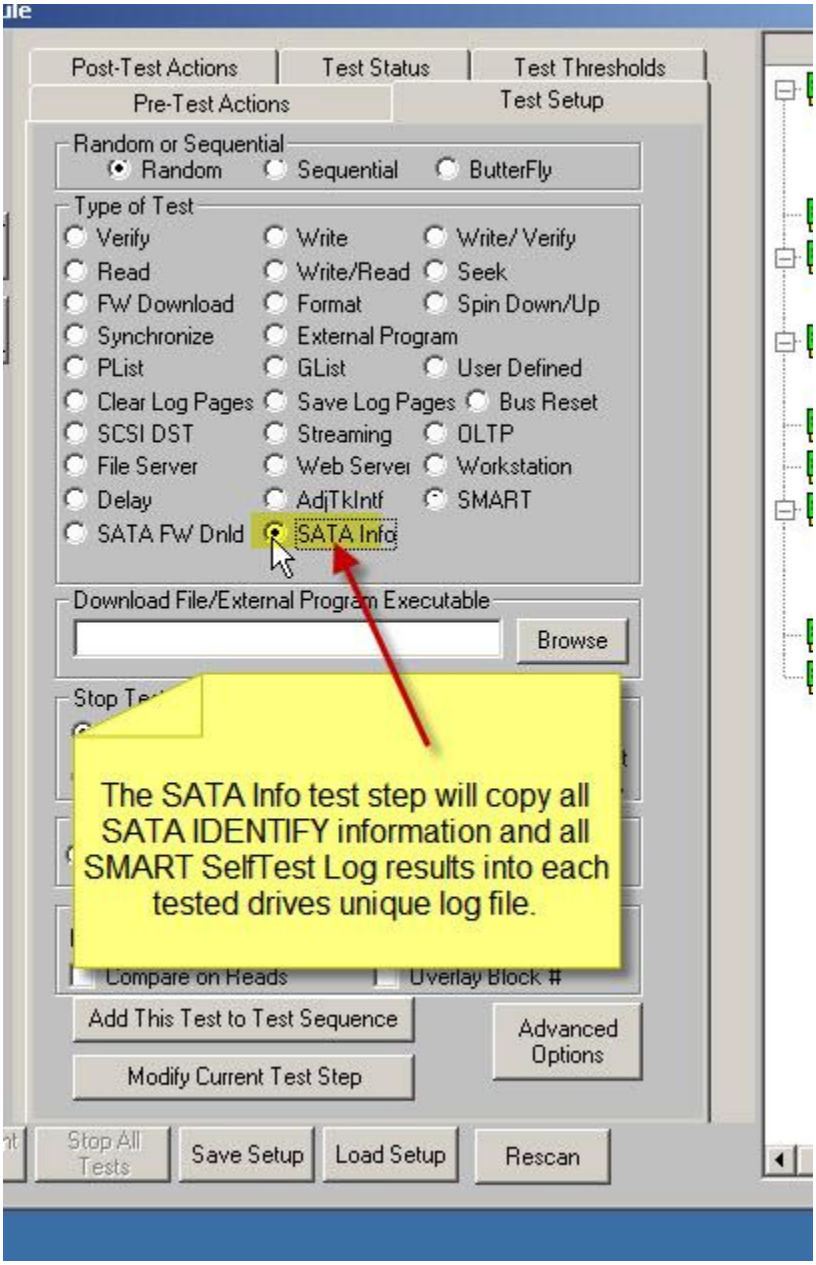
3. SATA Info Test type

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 drives log file.



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