Cervoz® FlashMonitor

Solid State Drive Monitoring Software

User Manual

Date: 2016.08.23

Revision: 1.1

File: Cervoz_FlashMonitor_User_Manual_Rev1.1

Revision History

Date	Revision	Description
2016/7/18	1.0	First Released
2016/8/23	1.1	Improved platform compatibility issues

Table of Contents

1. Overview

Cervoz FlashMonitor is specialized flash disk monitoring software developed in-house dedicated to monitoring disk's health for Cervoz Solid State Drives. Disk relevant information and health conditions can be checked and monitored in real time, preventing functional degradation and predicting disk lifespan.

Cervoz® FlashMonitor Features:

- ✓ Disk Information
- ✓ Health Status
- ✓ SMART Information
- ✓ Tool
- ✓ System Details

2. Cervoz Solid State Drive Families & OS Supported

2.1 Cervoz Solid State Drive Families Supported

Cervoz Series	Families
Momentum Series	M305
	M335

2.2 OS Supported

· Fully compatible with Windows 7, Windows 8, Windows 10

Important Note: Users must have software IE11 installed.

3. Initial Software Configuration

3.1 Operating Procedures

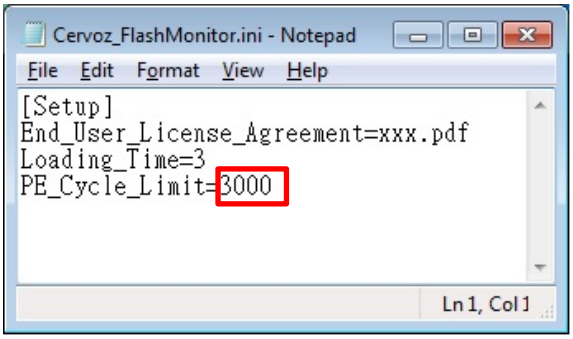
3.1.1 Open Cervoz Flash Monitor.ini

3.1.2 Input PE_Cycle_Limit value

(1) Refer to below table for the correct PE Cycle Limit value

Cervoz Series	PE Cycle Limit Value
Momentum Series **(Product Family Starts with the letter M, e.g: M335 / M305)**	3,000
Reliance Series **(Product Family Starts with the letter R, e.g: R310)**	20,000
Supreme Series **(Product Family Starts with the letter S, e.g: S310 / S210)**	60,000

(2) Input the PE Cycle Limit Value at below marked position in Cervoz Flash Monitor.ini file.

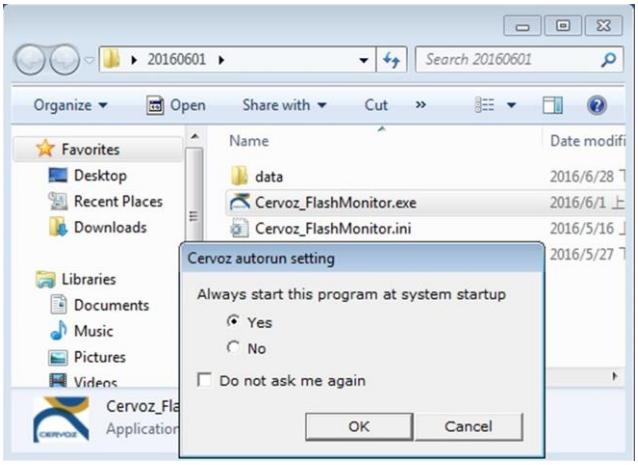


Important Note: The "Health Status" is calculated based on PE Cycle Limit Values; therefore a correct parameter must be entered prior to using Cervoz FlashMonitor.

4. Autorun Setting

4.1 Function Setting

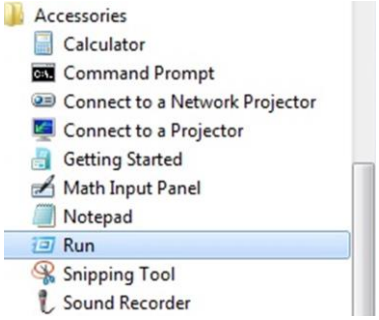
Double click the exe file to run Cervoz FlashMonitor, users can choose Yes/No to decide whether users wish to execute software automatically when entering the operating system.



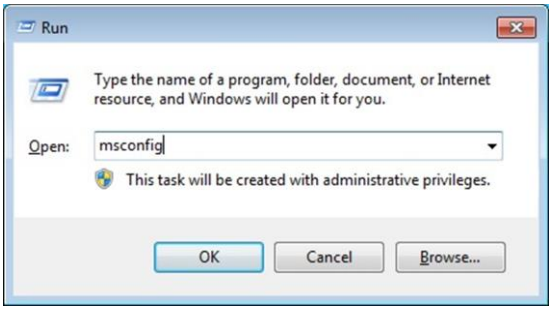
4.2 Modify Autorun Setting

Operating procedures:

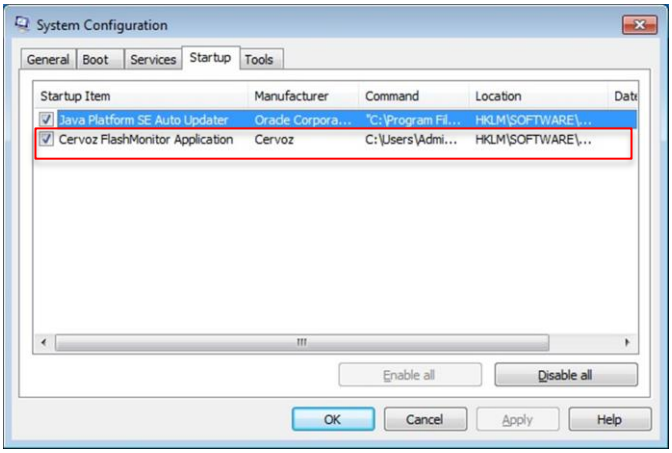
1. Windows Start → All Programs → Accessories → Run
   or Keyboard “Windows Key” + “R”



2. Type in command “msconfig” and click OK.



3. Below is the system configuration interface, select Startup Page.
   (1) Untick “Cervoz FlashMonitor Application”, click OK.
   (2) Restart software, users will receive the Autorun setting window again.



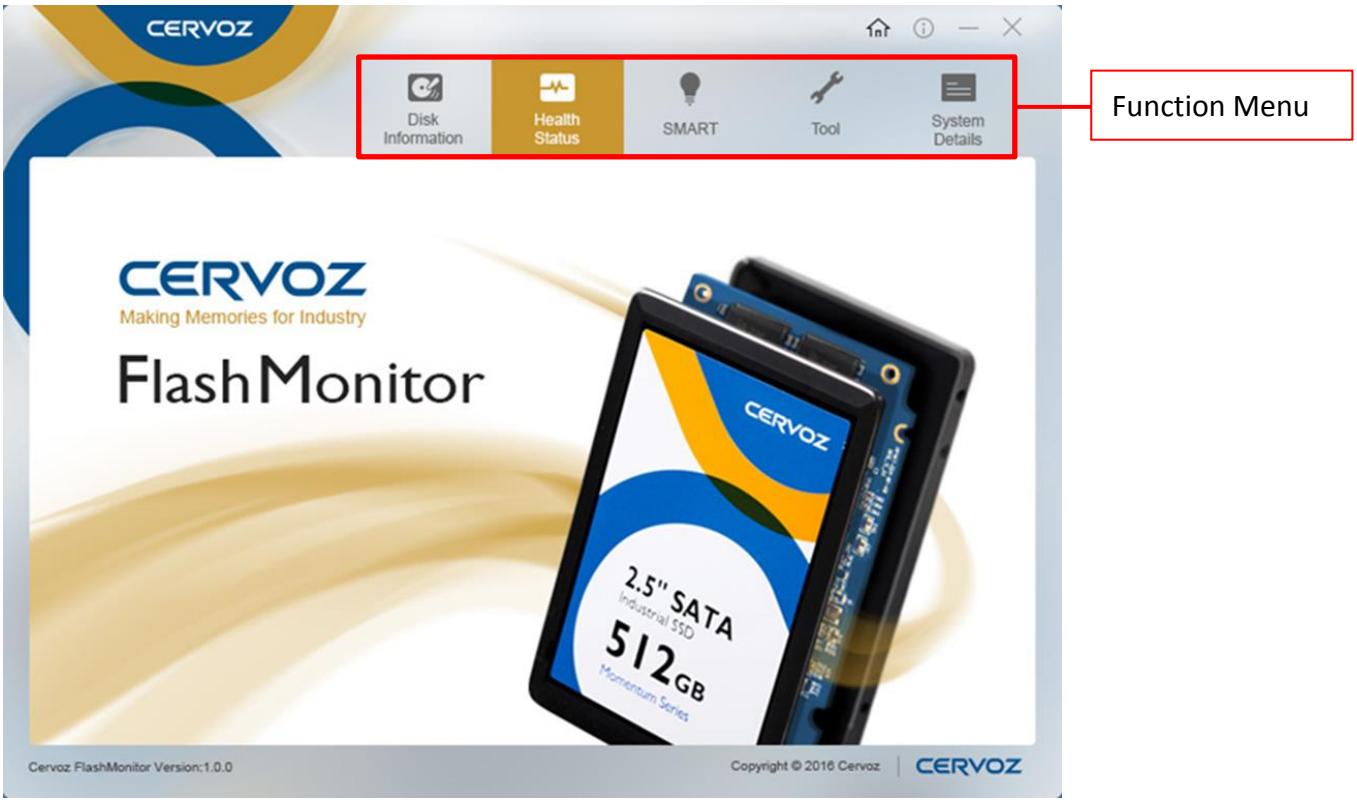
5. Welcome Page

The program is starting… Please wait a few seconds.

6. Main Page

Users can select between Cervoz FlashMonitor functions by using the menu panel.

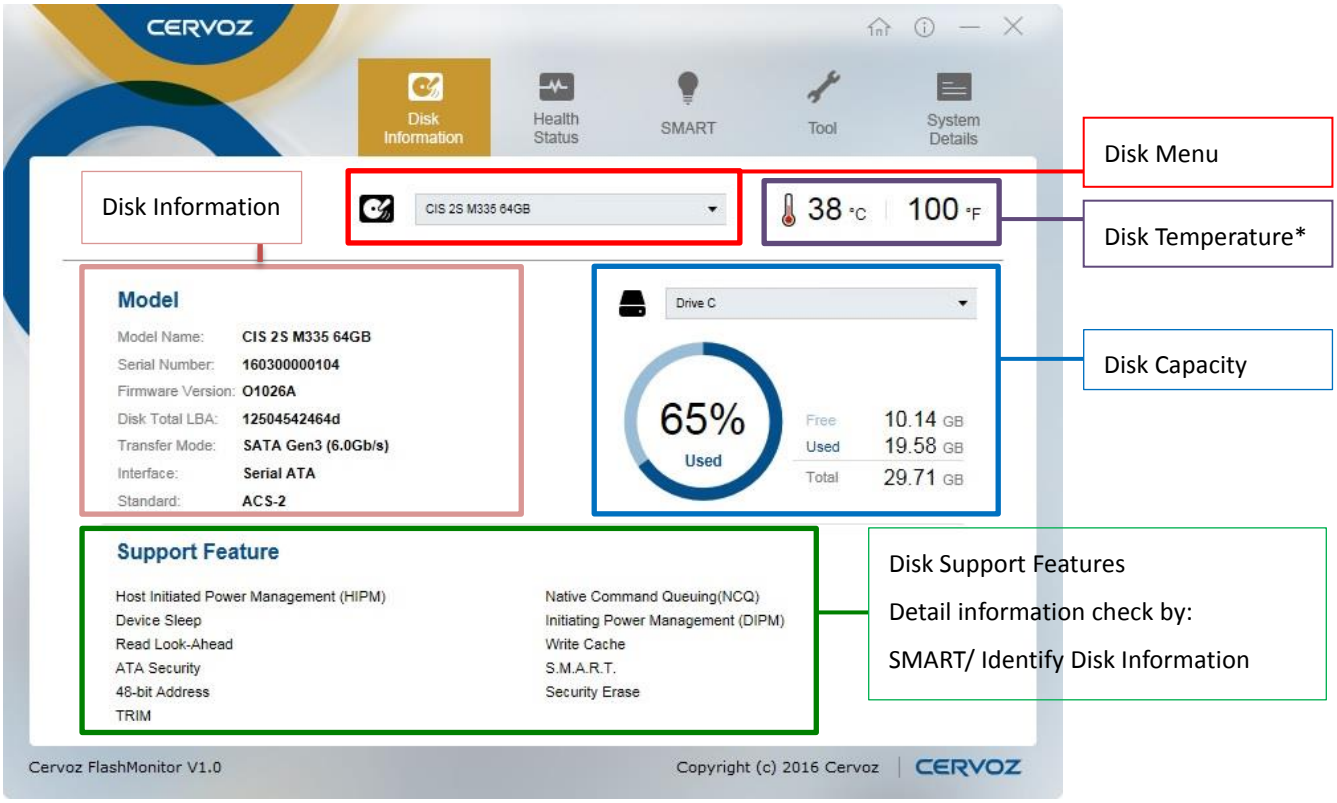
Users can go back to home page by clicking icon at any time.



7. Disk Information

The Disk Information page provides all Cervoz disk information, including part number details, firmware version, LBA value, disk capacity status, temperature value and many more.

Special supported features can be acknowledged on this page as well.

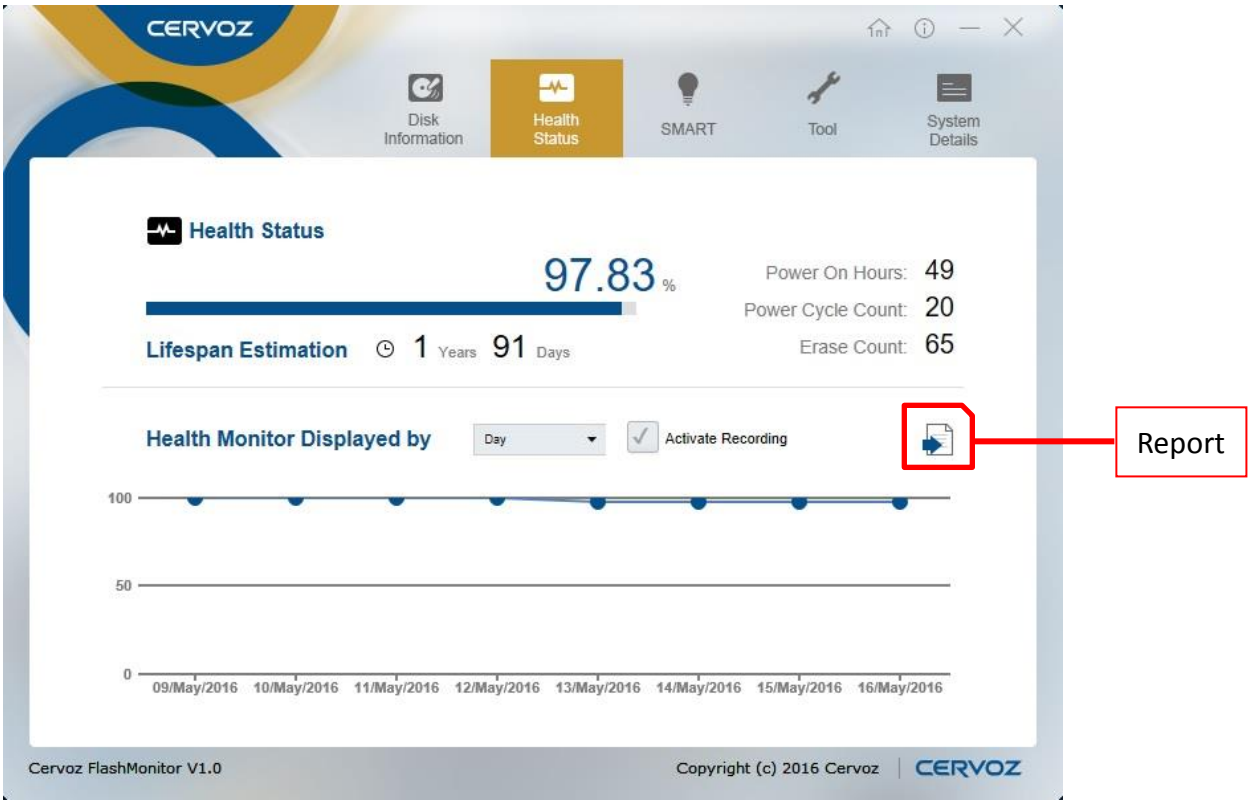


Important Note: The temperature shown in software is the temperature of the controller IC, it is normally much higher than the ambient temperature of the Solid State Drive.

8. Health Status

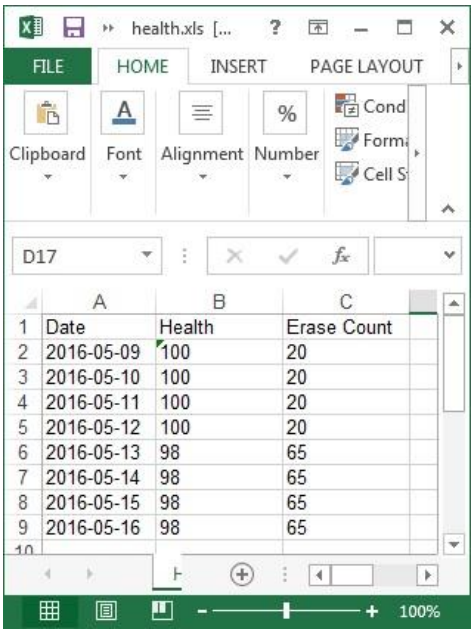
The Health Status page provides Cervoz disk health status in percentage, estimated lifespan, power on hours, power cycle count, and erases count values.

User can choose to monitor Cervoz disk's health degradation by day, month or year.



Users can click "Report" to export reports of the health status of the Solid State Drive.

This report will be saved as an Excel file. It contains exported Date, Health, and Erase Count.



	A	B	C
1	Date	Health	Erase Count
2	2016-05-09	100	20
3	2016-05-10	100	20
4	2016-05-11	100	20
5	2016-05-12	100	20
6	2016-05-13	98	65
7	2016-05-14	98	65
8	2016-05-15	98	65
9	2016-05-16	98	65

9. SMART

The SMART page provides full information of the Cervoz disk's SMART values.

Users can easily access to inspect SMART information of the Cervoz disk at any time.

SMART Definition:

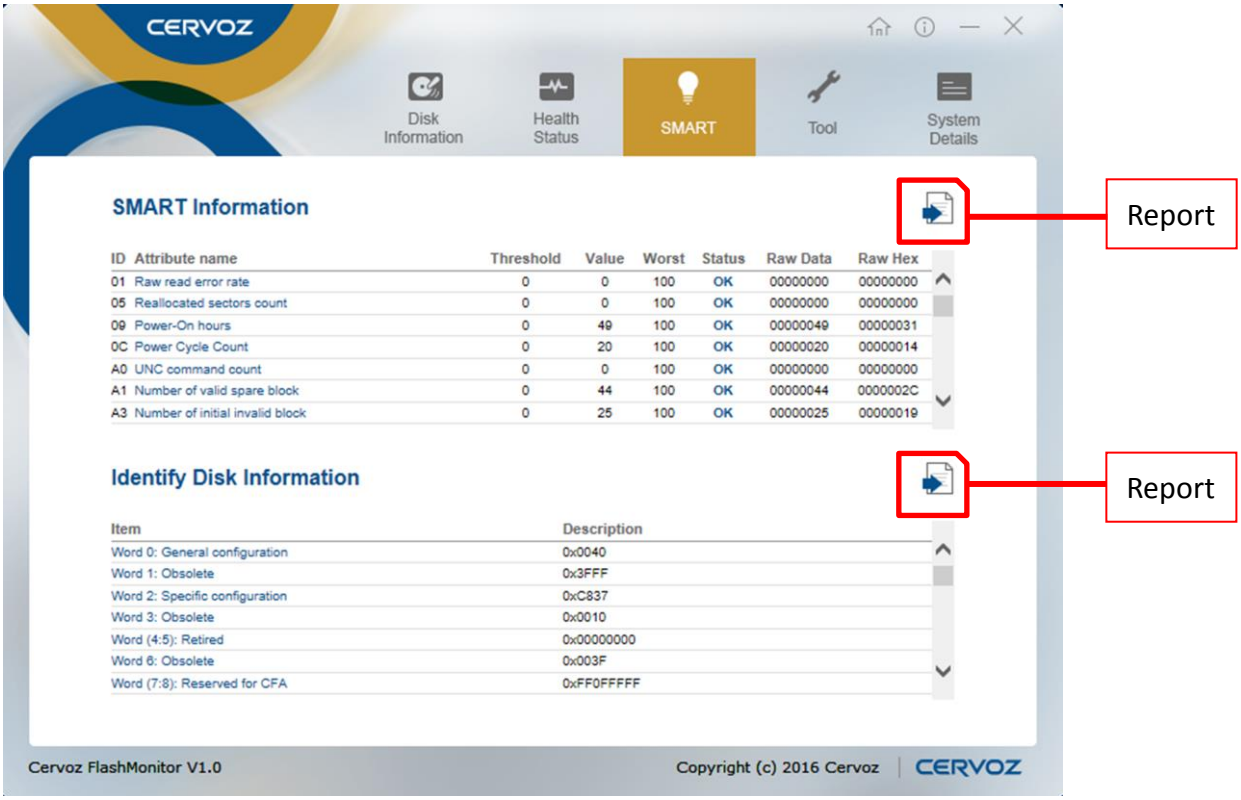
Self-Monitoring, analysis, and reporting Technology for prediction of device degradation and/or faults.

IDENTIFY (PACKET) DEVICE and SET FEATURES:

In the IDENTIFY DEVICE command various parameters are communicated to the host from the device. The following sections define those words (Identify ID: 0~255) that are different from and additions to the ATA/ATAPI-6 standard definition of the data contents.

Serial ATA features and capabilities include a means by which their presence and support may be determined, and a means for enabling them if optionally supported.

The IDENTIFY (PACKET) DEVICE settings requirements shall be implemented by native Serial ATA devices.

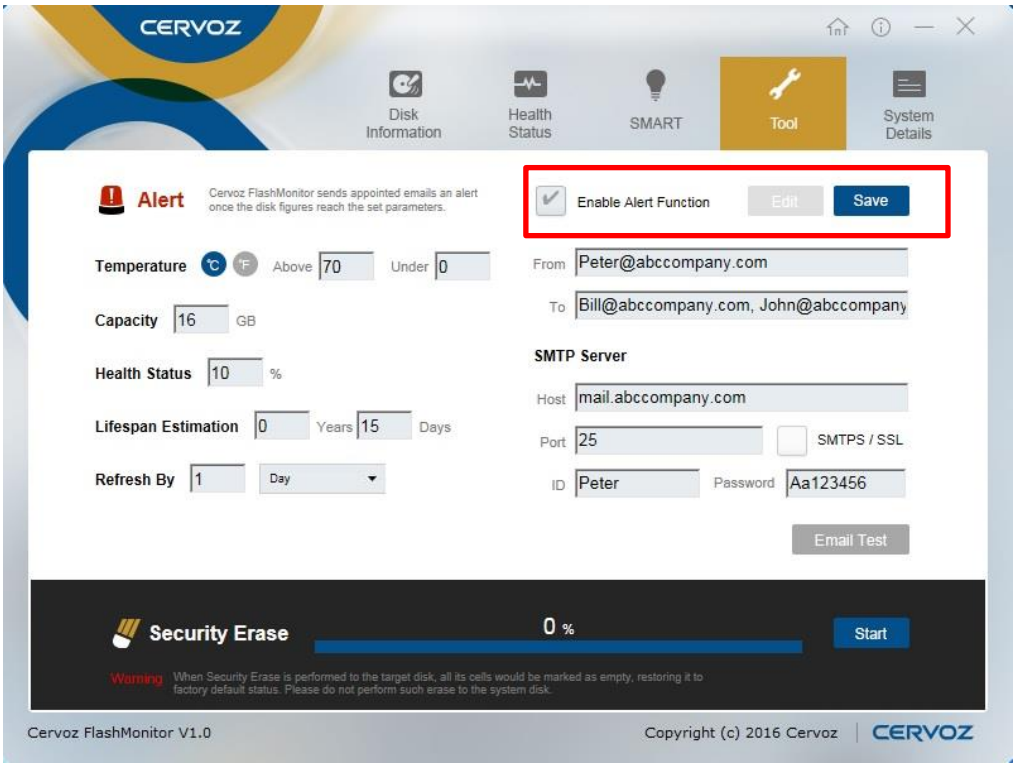


Users can click "Report" to export the report of the health status of the Solid State Drive. This report will be saved as an Excel file.

10. Tool

The Tool page offers two functions:

1. Alert – Users can easily set up alert parameters of the Cervoz disk; once figures reach the set parameters, system would immediately send out emails, so that user is in complete control. Parameters can be set for temperature, capacity, and health status and lifespan estimation.
2. Security Erase – With a simple click, user can erase all of Cervoz disk.



Start Alert Function:

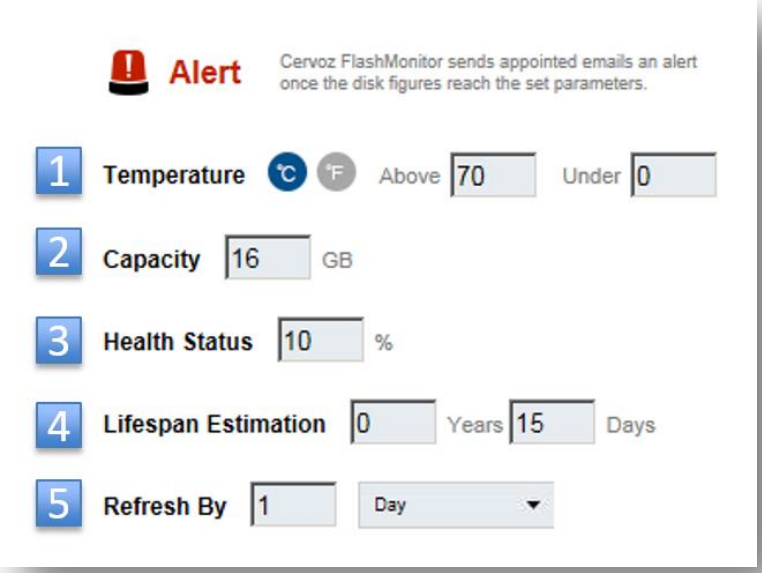
(1) Click “Edit”

(2) Tick “Enable Alert Function”

(3) The function will officially start after clicking “Save” once all parameter setting is completed

10.1 Alert

10.1.1 Alert Setting



1. Temperature:
   (1) Choose ℃ or ℉
   (2) Above: Highest Temperature (3 digits)
   (3) Under: Lowest Temperature (3 digits)
2. Capacity: Desired capacity
3. Health Status: Desired health percentage
4. Lifespan Estimation: Desired lifespan
5. Refresh By: Refresh software detection by Day, Month or Year

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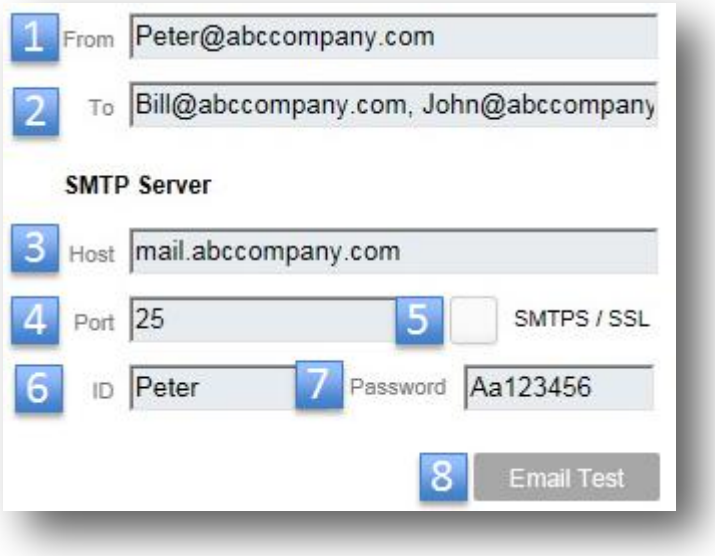
Important Note:

a. Field #1~#4 is optional.

b. Field #5 "Refresh By" is mandatory.

10.1.2 Email Setting



1. From: The administrator's e-mail address
2. To: The e-mail addresses of persons that need to be alerted (Maximum 100 persons)

Important Note: Segment with a comma between e-mail addresses.

SMTP Server

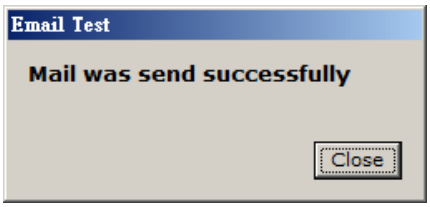
1. Host: Mail server
2. Port: Account Type/Server Port (e.g. POP3/Port : 25)
3. SMTPS / SSL: Activate SSL encryption

Important Note: Please confirm that sever port is correct when SSL function is enabled.

ID: The Sender's e-mail ID

1. Password : The password of sender's e-mail
2. Email Test : After filling field #1~#7, you can test the setting before saving it

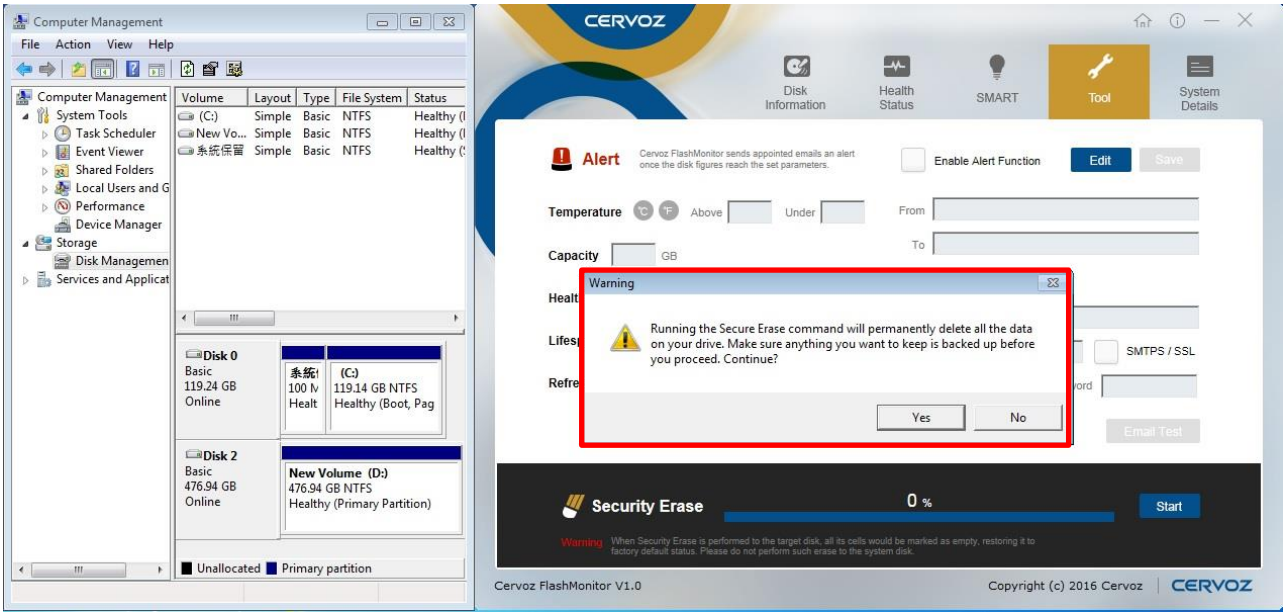
   Once test is successful, the following window is shown.



10.2 Security Erase

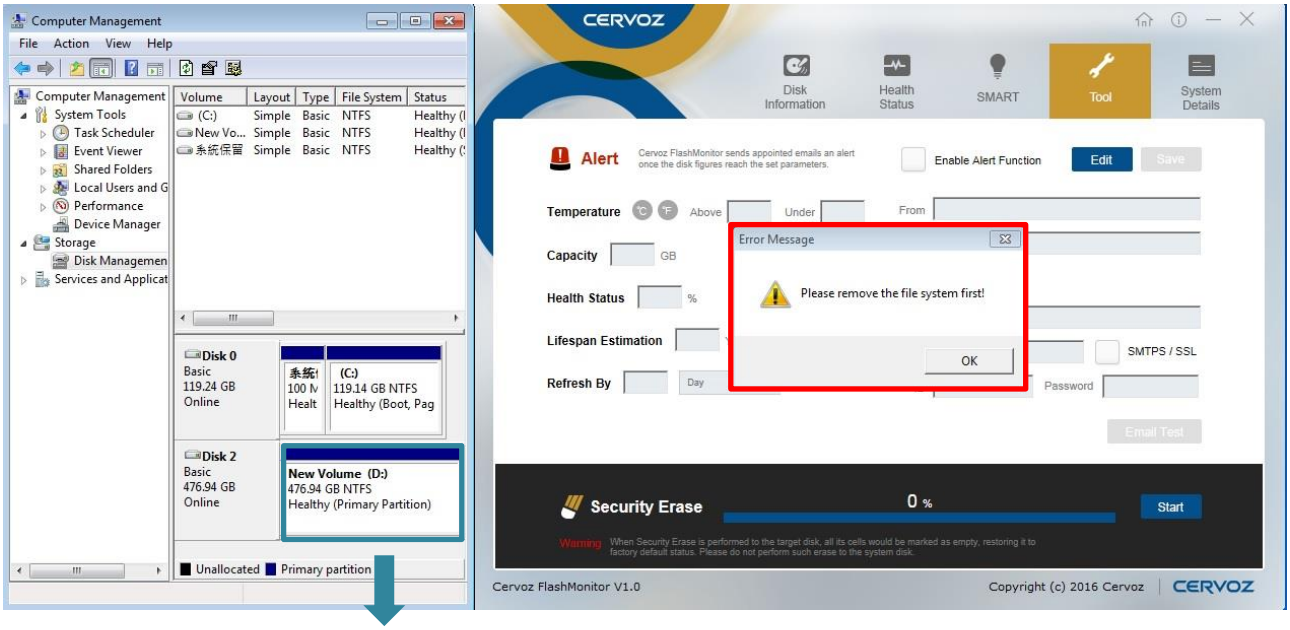
10.2.1 Reminders

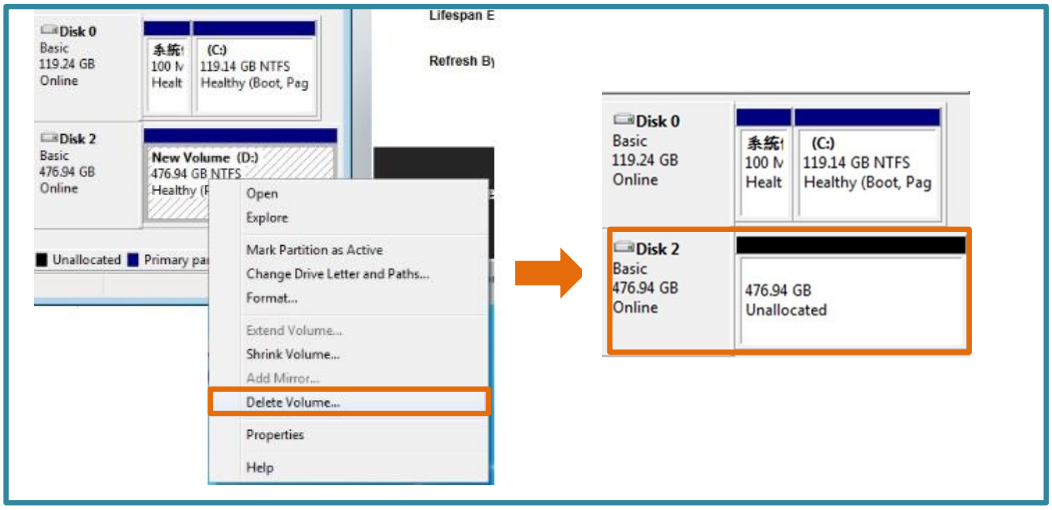
1. Running the Security Erase command will permanently delete all the data on disk, if users want to continue this process, click “Yes.”



2. Please remove the file system if the error message of “Please remove the file system first" is popped out.

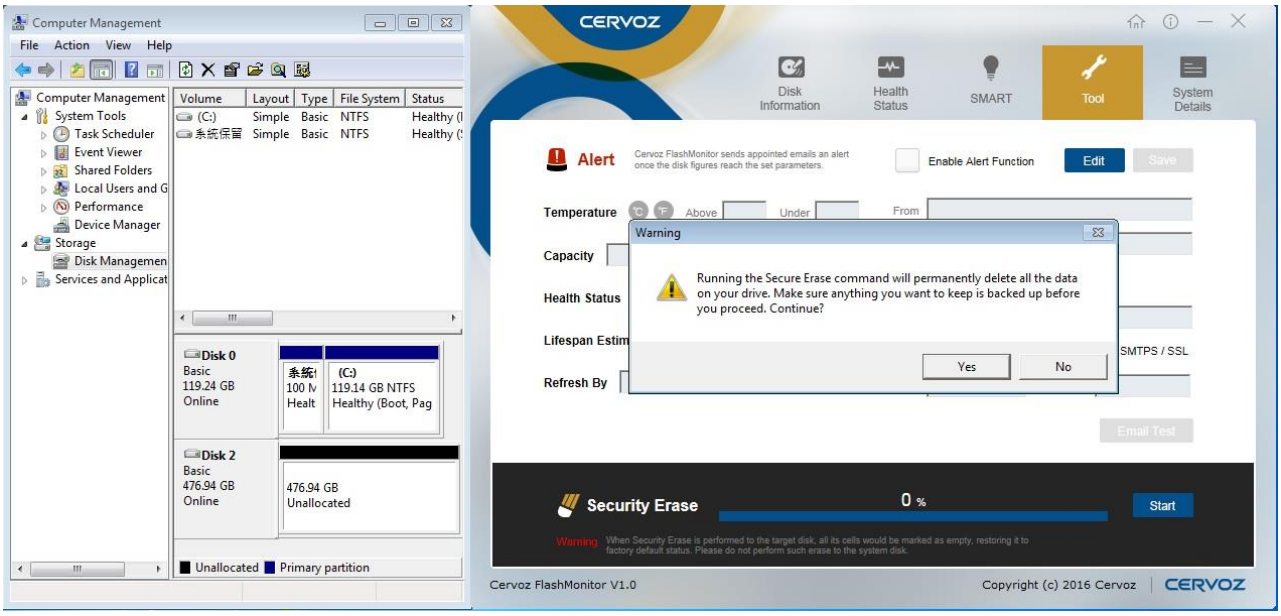
Important Note: After users remove the file system, Cervoz FlashMonitor must be restarted.





10.2.2 Security Erase function

1. Executing Security Erase Function, click “Yes” to continue ERASE function.



2. Automatic program execution is now in process, the start button is grayed out.

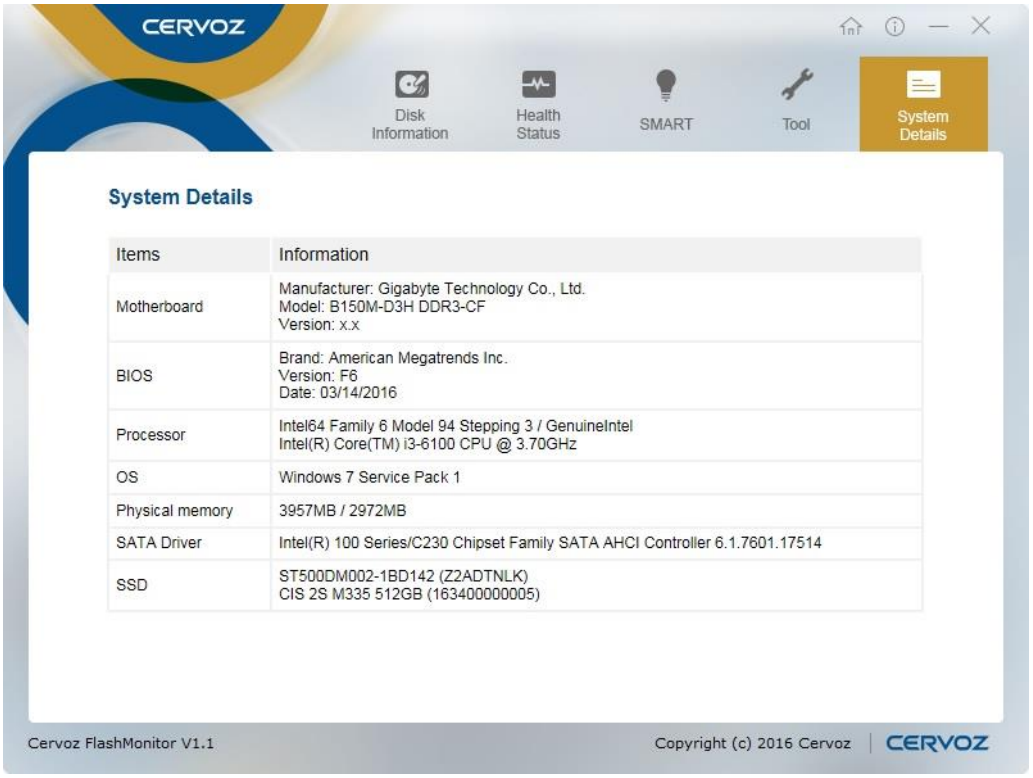
Once erase execution is completed, it shows 100%.

Important Note: Security Erase function can only be used on the subsidiary disks; it cannot be used on the host disk (stored with OS) of the platform.

11. System Details

The System Details page shows the detail information about the system:

1. Motherboard / System manufacturer, model name and version
2. BIOS brand, version and date
3. Processor information
4. Operating System information
5. Memory information
6. SATA Driver information
7. Solid State Drive / Hard Drive information



Items	Information
Motherboard	Manufacturer: Gigabyte Technology Co., Ltd. Model: B150M-D3H DDR3-CF Version: x.x
BIOS	Brand: American Megatrends Inc. Version: F6 Date: 03/14/2016
Processor	Intel64 Family 6 Model 94 Stepping 3 / GenuineIntel Intel(R) Core(TM) i3-6100 CPU @ 3.70GHz
OS	Windows 7 Service Pack 1
Physical memory	3957MB / 2972MB
SATA Driver	Intel(R) 100 Series/C230 Chipset Family SATA AHCI Controller 6.1.7601.17514
SSD	ST500DM002-1BD142 (Z2ADTNLK) CIS 2S M335 512GB (163400000005)