

Ontrack[®] EasyRecovery[™] 11

New Features Guide

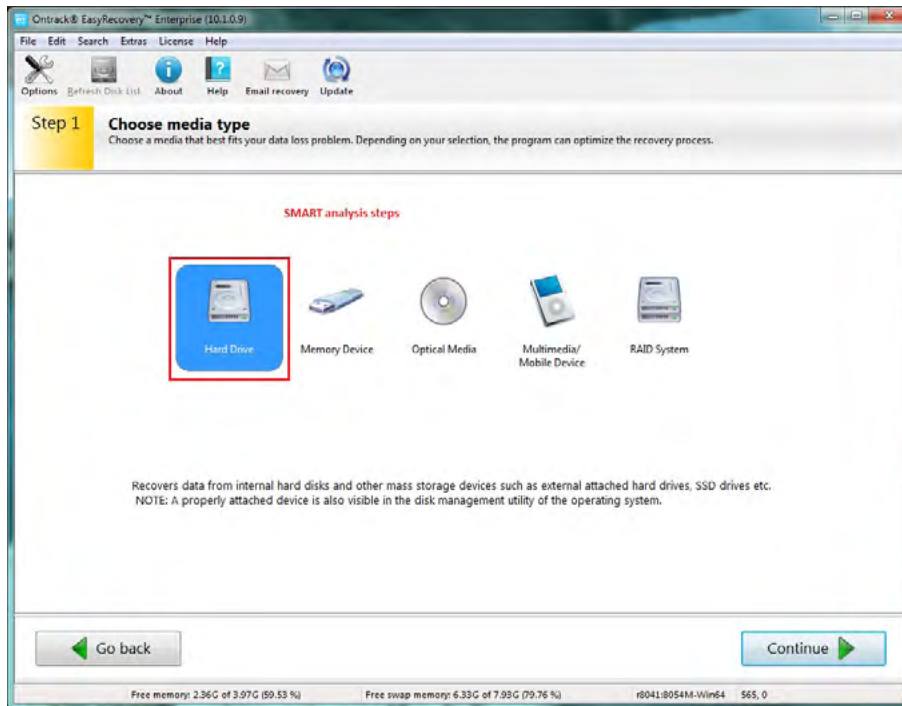
- S.M.A.R.T. Analysis
- Recovering from a VMware[®] VMDK image
- Secure Data Erasure

S.M.A.R.T. Analysis

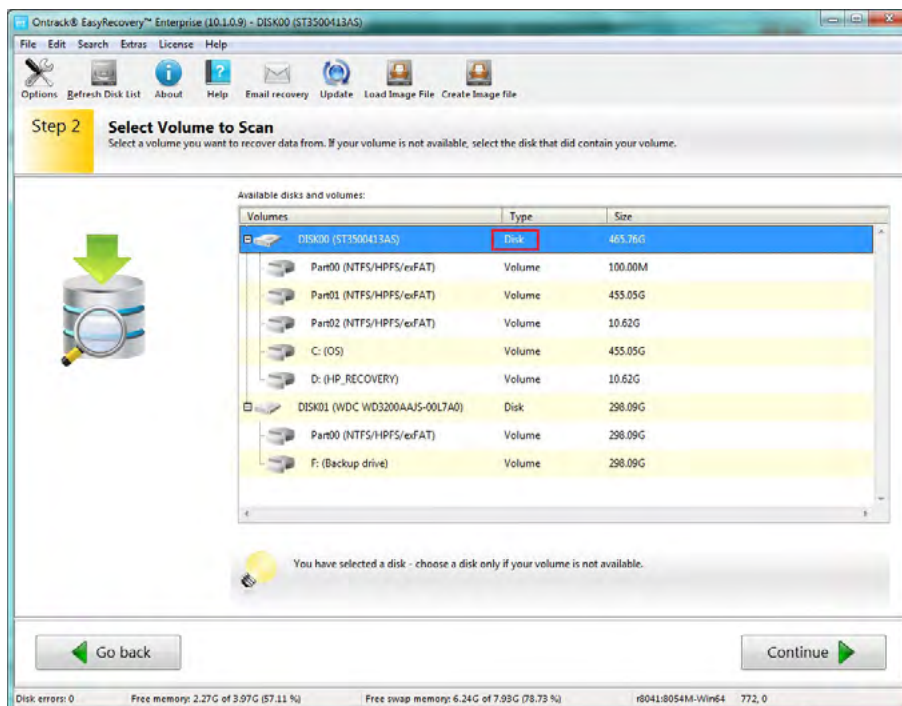
S.M.A.R.T. Scan identifies the amount and type of data being used, the condition of sectors, and other critical hard drive metrics. Hard drive metrics include read error rate, spin-up time, reallocated sector count, seek error rate, spin retry count and temperature. These metrics allow users to make informed decisions about whether to repair or replace hardware.

How to run the S.M.A.R.T. analysis, follow this procedure:

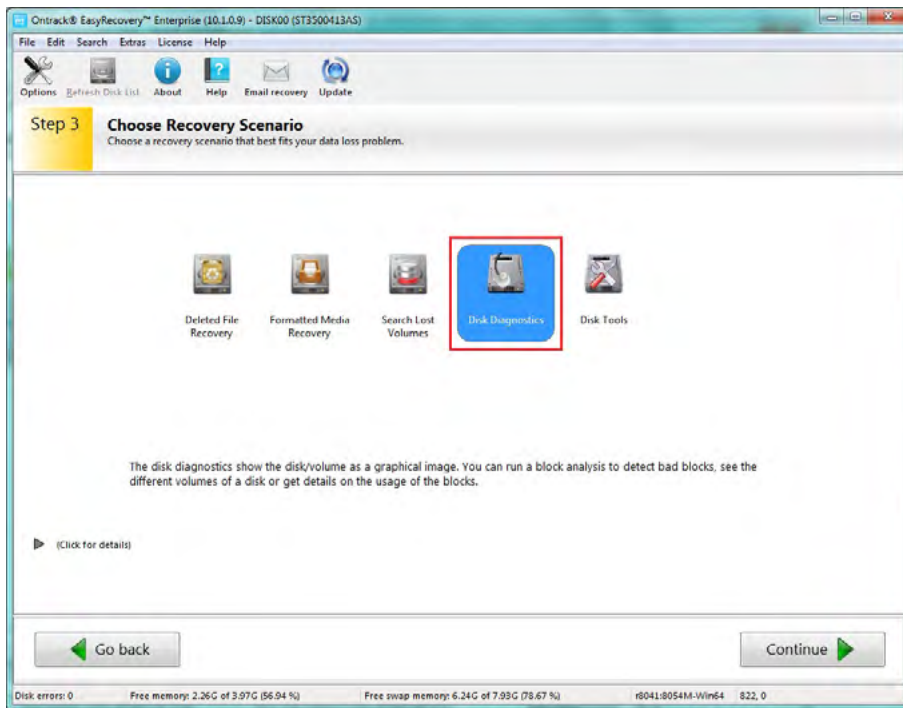
1. Select Hard Drive



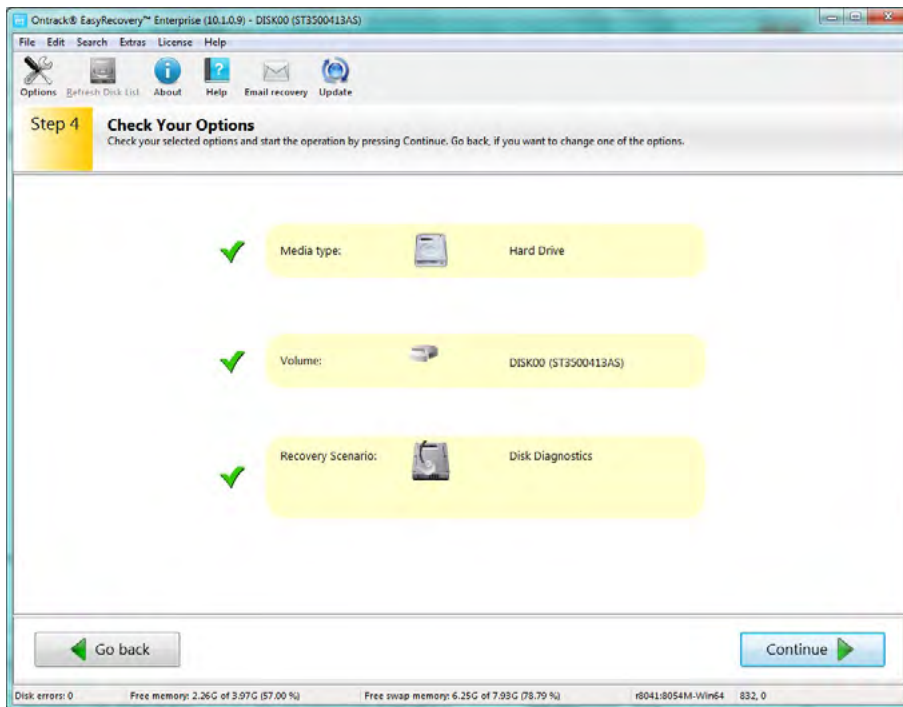
2. Select Physical "Disk", not volume



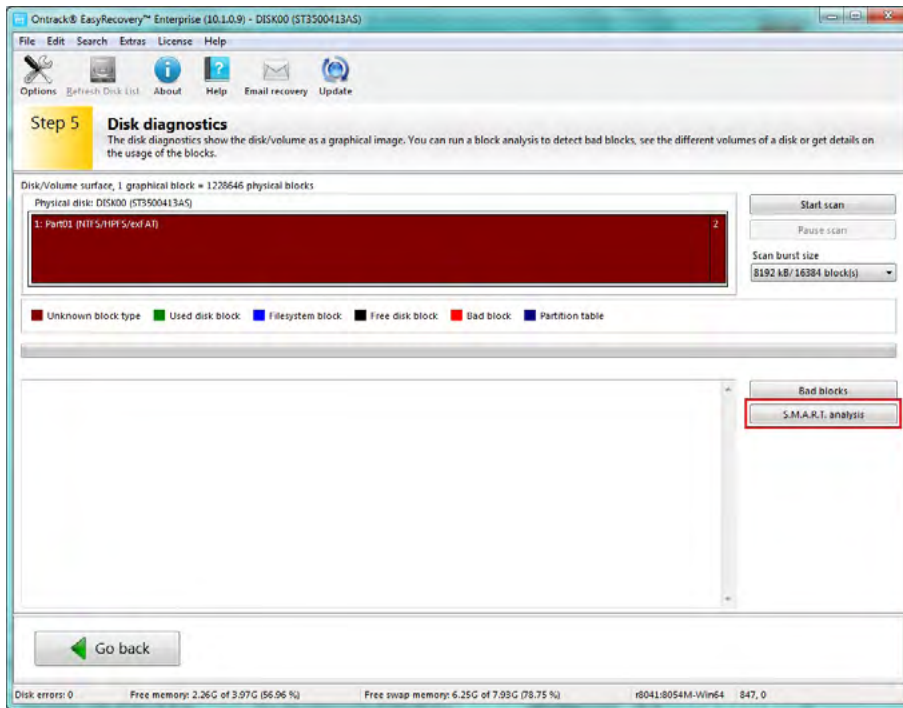
3. Select Disk Diagnostics



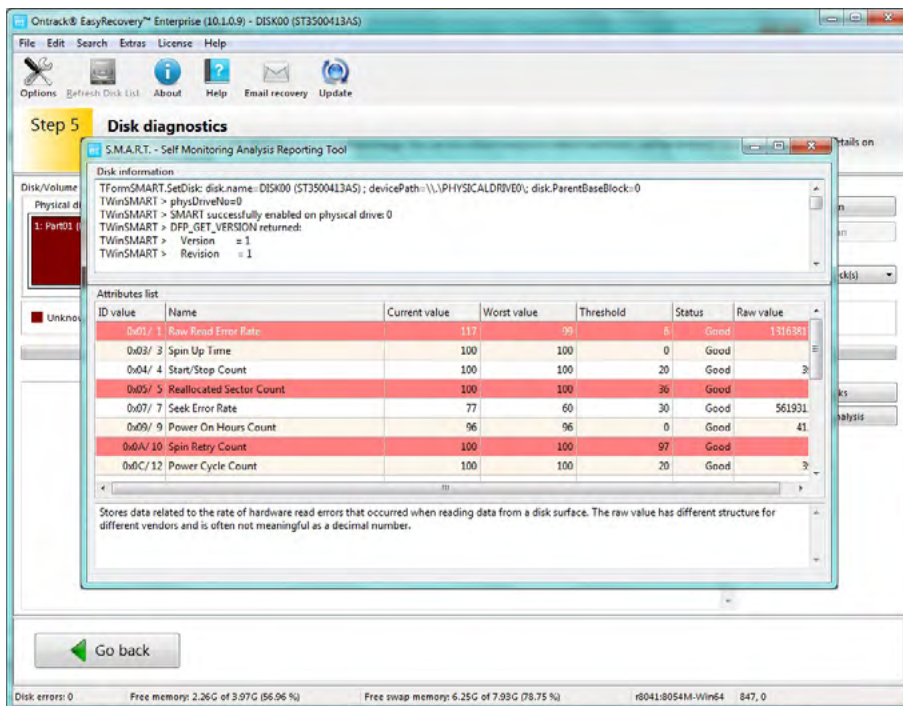
4. Review selections



5. Click on 'S.M.A.R.T. analysis'



6. Attributes and values are displayed – look for any items that may be listed as “bad”



Recovering from a VMware VMDK Image

Ontrack® EasyRecovery™ Enterprise supports recovery of VMDK files stored on local file systems (i.e. VMware Workstation or Fusion) in either flat or sparse format. All “local” VMDK images are supported.

Note: VMDK files stored on VMFS file systems are not currently supported (i.e. VMware vSphere data centre products).

VMDK images are virtual hard drives containing virtual operating systems running under a host system – typically Windows® or Linux. Often there are multiple VMDK images created for each virtual system and choosing the correct VMDK image is critical for a successful recovery scan. To scan a VMDK file, load the VMDK image and choose the corresponding volume.

Multiple VMDK files:

- » Snapshot VMDK File: When creating a snapshot in VMware, it will start a new VMDK, and will never touch the original VMDK. All changes to the original VMDK will be written to the new VMDK and the new VMDK will increase in size.
- » Extent VMDK File: Splitting the complete image data into multiple VMDK files.
- » If the image uses more than one VMDK file, it will create another VMDK file, called a ‘descriptor’ file. This very small descriptor file contains a description with links to all VMDK files that belong to the image.

Scenarios:

- » If there is only a single VMDK file (no snapshots or extents), Ontrack EasyRecovery Enterprise will find the embedded descriptor in that single file.
- » If there are multiple snapshot VMDK files, the customer needs to choose the descriptor file. Depending on the point in time the customer wants to recover, the corresponding snapshot descriptor needs to be chosen - the later the snapshot the more recent the data.
- » If there is more than one extent VMDK file, choose the small VMDK file (descriptor). Depending on the point in time you want to recover, choose the corresponding extent file (or if more VMDK files exist for that extent file, choose the descriptor file belonging to that extent file). The more recent the extent file, the more complete the data.

How to open a VMDK file

1. Select Hard Drive
2. Click on “Load Image File” on the top toolbar
3. Browse to your VMDK file, and click Open
4. This will display the drive list. Select the volume/partition from which you want to recover
5. Select your scan options and start the scan

Secure Data Erasure

Depending on the version of ER11 that is being used (Ontrack EasyRecovery Home, Professional or Enterprise), there are different levels of Wipe features.

Ontrack EasyRecovery Home does not have the disk tools, you only have the file/folder wipe feature which is visible after a scan is completed and you select a file or folder.

Ontrack EasyRecovery Professional or Enterprise have Wipe Disk and Clean Up Disk in the disk tools section. In all cases, the features are disabled in demo mode.

Data Erasure options:

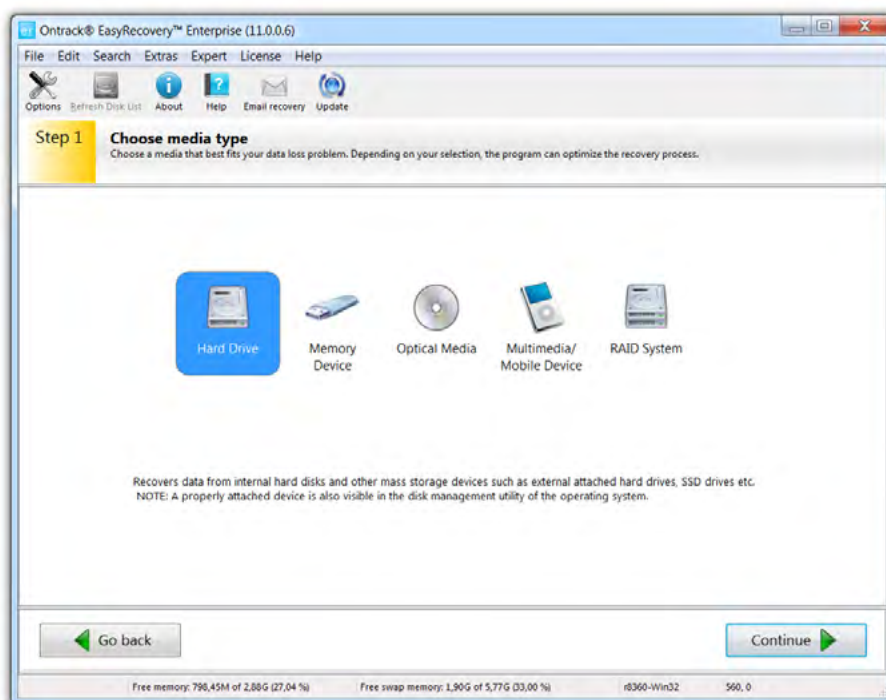
- » Wipe Disk – completely wipes the entire drive (Disk Tools)
- » Clean Up Disk – wipes free space only (Disk Tools)
- » Wipe/secure deletion – this is a file/folder wipe located on the upper menu bar and is active AFTER a scan when you select a file/folder

In the Home Edition, the shortcut to the delete function is as follows:

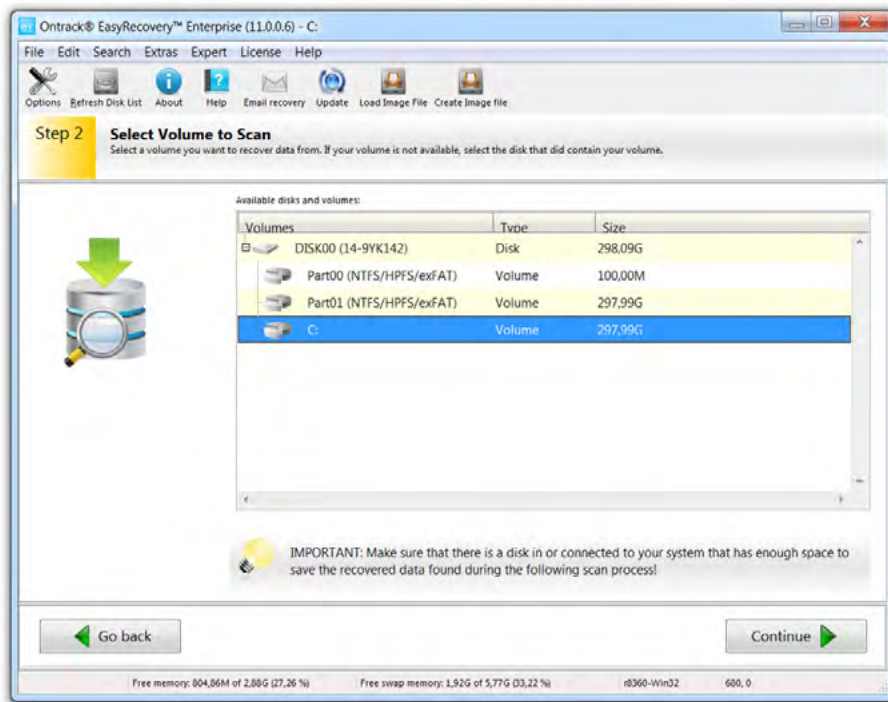
1. Select “Explore Volume”
2. Hit next and the delete feature appears on the upper icon bar

Step-by-step instructions on how to erase the files/folders in the Home, Professional and Enterprise Edition:

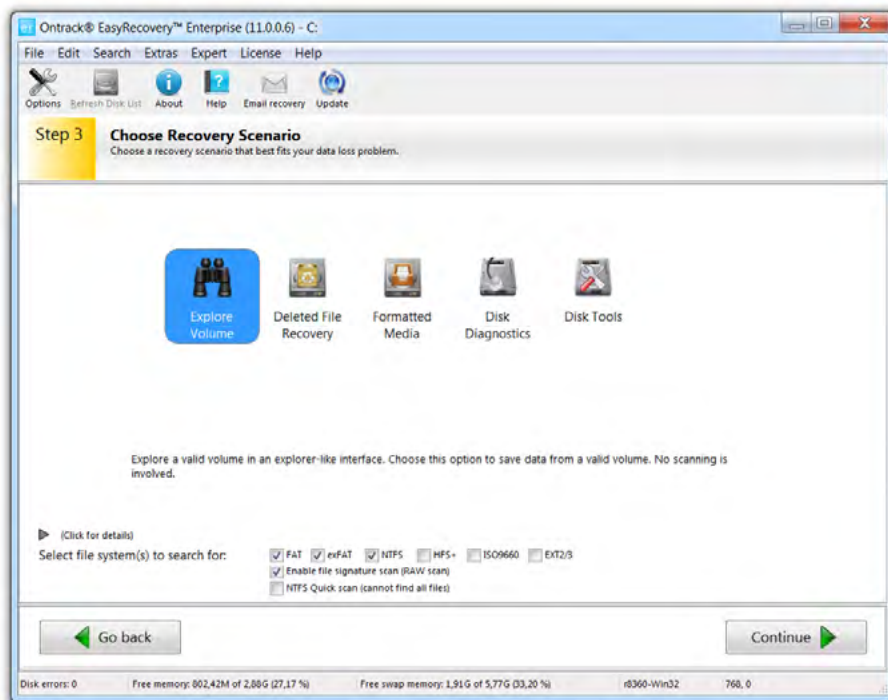
1. Select Hard Drive



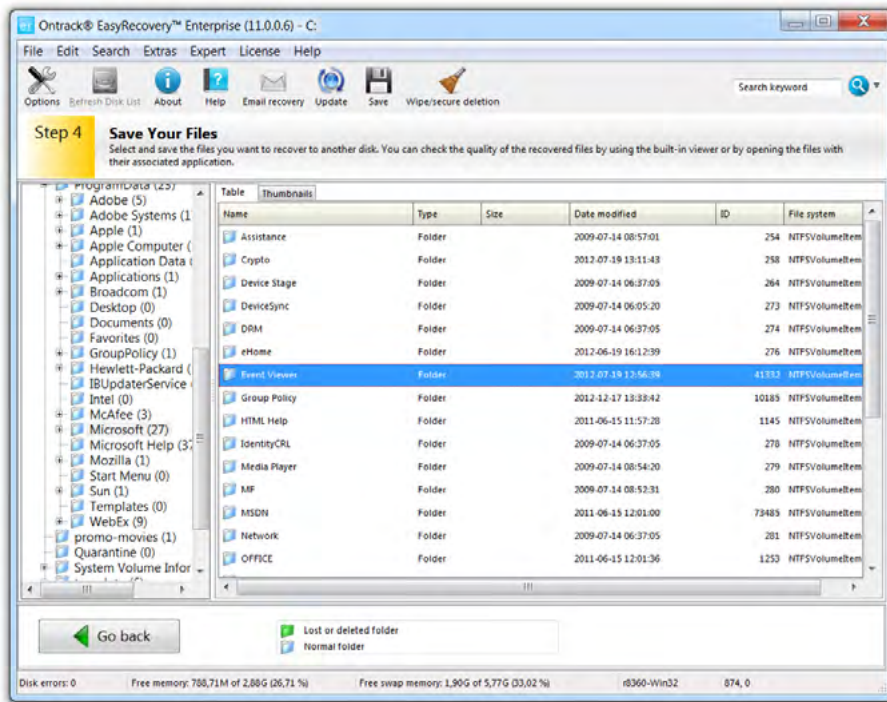
2. Select the volume/drive letter that contains the data you wish to erase



3. Select "Explore Volume"



4. Click on the folder/file you wish to delete and click the “wipe/secure deletion” button on the top toolbar



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