



New Version

Version 6 takes HDSHredder to a whole new level. In this version, several apps and components, some of which date back to the development of HDSHredder 3.2 in 2008, have been replaced with updated versions. This also encompasses the CLI variant, which was entirely redeveloped from the ground up and outsourced as a separate product. This step was necessitated by the evolution that HDSHredder has undergone since 2008. During that time and as of today, over 30 full versions and over 350 intermediate versions (service updates) of HDSHredder have been released. So far, HDSHredder had only been available in English and German. Version 6 will be the first version of HDSHredder to offer a choice of 11 different languages. This is our response to HDSHredder's increasing popularity around the world, proven by our valued customers in more than 165 countries.



What's New?

In HDSHredder 6, **new apps were developed for all deletion functions** to simplify operation and to adapt to current conditions. You now have the option to **reformat a disk** with a new file system following a security deletion. The previously offered apps for disk deletion are still available in the "Classic" tab to accommodate the transition.

Also, if needed, SSD and M.2 / NVMe disks can be completely reset with the **TRIM command**, which results in **writing speeds as if the disks were new**. This makes HDSHredder 6 ideal to securely delete used disks and to prepare them for reuse (**refurbishment**). Also to aid in this purpose, the DiskTest app provides a useful addition by conducting **surface tests of disks**.

Furthermore, two new apps have been added which apply the device standards **SecureErase** and **Sanitize**. They allow you to conduct and control device-internal deletion mechanisms, provided that these are implemented in the respective disks.

With HDSHredder 6, **businesses and service providers may have their own logo integrated** into the interface and the PDF reports. If this option is of interest to you, please contact Miray Software.

HDSHredder 6 also offers full support for **network boot (PXE & UEFI)**. With the new product Miray BootCast, a particularly easy-to-use solution is available for this purpose. It can be set up in a matter of minutes and supports HDSHredder/S and HDSHredder/L as well as HDSHredder/W together with Windows PE.

Never before have there been so many new features in a single version update of one of our products. On the following pages, we will outline 33 good reasons for you to choose HDSHredder 6.

Details on ongoing improvements to HDSHredder can be found online in the HDSHredder changelog at:

<https://www.miray-software.com/Changelog/HDSHredder>



New Features

SecureErase and Sanitize Commands | 6.0 PE and up

By supporting the commands SecureErase for hard disks and Sanitize for hard disks and SSDs (also for M.2/NVMe), HDSHredder can now apply the integrated sanitation mechanisms of disks, provided they are implemented in these disks.

Secure Deletion Apps Completely Renewed | 6.0 FE and up

The apps for secure disk erasure have been completely revised, redesigned and improved. The TRIM option for SSD and NVMe and the option to reformat a disk afterwards have been added. The app that allows user-defined, individual erasing has also been systematically extended.

Automatic Formatting Post Deletion | 6.0 PE and up

At the start of a deletion process, you can choose which file system you wish to automatically format the disk with. For specific partitioning and formatting you may use the Partitioner app.

Enhanced Reports in the New Apps | 6.0 PE and up

The new apps also contain updated and enhanced deletion reports along with a tool to open them directly within the program.

TRIM Option and App for SSD & M.2/NVMe | 6.0 PE and up

With the TRIM option integrated into the deletion functions, along with a dedicated TRIM app, SATA and M.2/NVMe disks, by means of an additional memory cleanup, can be reconditioned for fast access comparable to their new condition.

DiskTest App – Storage Media Test | 6.0 PE and up

This disk surface test can be used to check hard disks, SSDs, flash drives and USB sticks for faulty memory. The scope ranges from basic tests to advanced quality assurance tests.

M.2/NVMe SSDs Fully Supported | 6.0 SE and up

Thanks to improved support for M.2 and NVMe flash storage media, these can now be used to their full extent.

SD/microSD and eMMC now Supported | 6.0 PE and up

Integrated eMMC storage (notebooks, tablets) as well as SD and microSD cards can also be used with the self-booting variants and can be securely deleted or refurbished.

Thunderbolt Device Support | 6.0 SE and up

HDSHredder's self-booting variants now also support devices that are connected via a Thunderbolt port.

Live Status – Track Processes Online | 6.0 PE and up

Once authorized by the user, program statuses can be monitored online. This is especially convenient when needing to track several simultaneous processes without being physically present or on site.

Email Notifications upon Completion | 6.0 PE and up

To complement the tracking in Live Status, you can also be notified by email once a program process is completed.

SecureBoot Up-to-date | 6.0 BE and up

UEFI SecureBoot was raised to a new security level for all operating systems in 2021. HDSHredder has been equipped accordingly and is therefore future-proof to run on PC platforms with UEFI Secureboot.

Network Boot for PXE and UEFI | 6.0 PE and up

HDSHredder 6 supports PXE and UEFI network boot in all of its variants (HDSHredder/W, HDSHredder/S and HDSHredder/L). For this specific purpose, we developed an additional, optional component – Miray BootCast. It cuts any time and effort usually needed for the set up of a network boot environment to almost zero. It integrates seamlessly into large and small networks and can be started as an application or as a service.

Tablets – Support Improved | 6.0 PE and up

Thanks to improved hardware support for tablets based on PC technology (≠ ARM tablets), HDSHredder can be used directly on many models.

On-Screen Keyboard – Virtual Keyboard | 6.0 PE and up

The on-screen keyboard is designed for use only with touchscreens and without a connected keyboard and/or mouse (e.g. in production areas), or for mouse-only operation (trackpad) in dust-proof areas (e.g. medical technology).

Target Disk Mode via Firewire on Mac | 6.0 PE and up

HDSHredder can now use Apple's Mac PCs in Target Disk Mode if a connection is established via Firewire. The disks installed in the Mac can then be addressed directly in the Mac without having to remove them.

64 Bit Boot-Setup | 6.0 FE and up

The Boot Setup, which creates boot media with HDSHredder/S and HDSHredder/L on Windows, now supports 64 bit. This allows boot media to be created on a pure 64 bit Windows system (without WoW64 subsystem, e.g. Windows PE 64).

Spot is Now a File Manager | 6.0 PE and up

Until now, the app Spot had been a mere file browser that was used to view folder structures and files. The app can now also be used to copy, move and delete files and folders, particularly in the self-booting variants HDSHredder/S and HDSHredder/L.



Open **Text Files and Images** in Spot | 6.0 FE and up

Images and text files can be opened directly in Spot via the context menu – all other files can be opened, also directly, in the hex editor.

Custom Logo Integration – Service Providers | 6.0 PE and up

We offer the option to integrate your service business logo into the PDF reports. This helps you to remain present to your customers, even after you have completed the assignment. Please contact us for more information!

New **Progress Indicator** | 6.0 FE and up

The newly developed and comprehensively arranged status indicator offers a clear overview of essential and detailed information both during an active process and once the process is completed.

Pic Auxiliary – Open Pictures In Spot | 6.0 FE and up

The Pic auxiliary has been added to the Spot File Manager. Pic lets you open pictures directly within the Spot File Manager to provide a better oversight of folders by being able to view their contents.

Hex Auxiliary – Hex Editor for Files | 6.0 FE and up

The Hex auxiliary is a simple, straightforward hex editor for files, which allows you to open and modify any file in hex view.

Hybrid ISO Download Package Option | 6.0 BE and up

You can now receive the program package as Hybrid ISO, which can be written directly to CD/DVD or a USB stick. It lets you create HDSHredder boot media without using Boot Setup, e.g. when working on Linux..

DiskQuarantine – Block File System Errors | 6.0 BE and up

DiskQuarantine prevents errors in the partitioning and file system structures from impeding or disrupting the program operation, especially when working with defective disks.

SafeDisk Applet – Disk Safety Features | 6.0 SE and up

Aside from the DiskQuarantine feature, the SafeDisk applet also allows you to unlock password protected disks. It will also alert you when the Windows Controlled Folder Access is active.

SafeRemove Applet Improvement | 6.0 FE and up

The SafeRemove applet has been equipped with an intuitive display for disks and volumes, and informs of successful disk removal with a popup.

WLAN in Self-Booting Variants | 6.0 PE and up

HDSHredder/L contains a WLAN applet to establish a WLAN connection in self-booting use, e.g. to save reports.

Network Shares in Self-Booting Variants | 6.0 PE and up

Via the network share applet of HDSHredder/L, network shares with access protection (password) can be fully used by all apps, e.g. for saving reports or storing other files.

Intel NICs – Advanced Support | 6.0 BE and up

In HDSHredder/S, support for Intel network adapters (NIC) has been significantly expanded and now encompasses various additional LAN NICs, including many onboard adapters.

Intel SATA/NVMe-Merged Controllers | 6.0 SE and up

HDSHredder/S supports the special remapping capabilities of Intel SATA/NVMe controllers for both types of SSDs (SATA and NVMe), so that disks which are connected to them can be used normally.

Intel VMD – Advanced Support | 6.0 PE and up

HDSHredder/S and HDSHredder/L now support the new Intel Volume Management Device – a special controller for NVMe SSDs. Disks that are connected to this controller can be used with HDSHredder.

Support for **PCIe Hot-Swapping** | 6.0 PE and up

Hot-swapping of PCIe devices is now supported, provided that both of the PCIe device (e.g. adapter card) and the PCIe port are capable of hot-plugging.

Jumplist in Windows | 6.0 FE and up

On Windows (HDSHredder/W), the most important apps can now be started directly from a jumplist.



Feature Matrix

The table below provides an overview of the main features that have been added to HDSHredder, along with their availability in the respective editions. Unfilled dots (◻) indicate that, while the feature is available, it cannot be used to its full extent when working with the edition in question.

Ver. New Features in HDSHredder 6	FE	BE	SE	PE	EE
6.0 SecureErase and Sanitize Commands				▪	▪
6.0 Secure Deletion Apps Completely Renewed	▪	▪	▪	▪	▪
6.0 Automatic Formatting Post Deletion	◻	◻	◻	▪	▪
6.0 Enhanced Reports in the New Apps				▪	▪
6.0 TRIM Option and App for SSD & M.2/NVMe				▪	▪
6.0 DiskTest App – Storage Media Test				▪	▪
6.0 M.2/NVMe SSDs Fully Supported	◻	◻	▪	▪	▪
6.0 SD/microSD und eMMC now Supported				▪	▪
6.0 Thunderbolt Device Support	◻	◻	▪	▪	▪
6.0 Live Status – Track Processes Online				▪	▪
6.0 Email Notifications upon Completion				▪	▪
6.0 SecureBoot Up-to-date	◻	▪	▪	▪	▪
6.0 Network Boot for PXE and UEFI				▪	▪
6.0 Tablets – Support Improved	◻	◻	◻	▪	▪
6.0 On-Screen-Keyboard – Virtual Keyboard				▪	▪
6.0 Target Disk Mode via Firewire on Mac				▪	▪
6.0 64 Bit Boot-Setup	▪	▪	▪	▪	▪
6.0 Spot is Now a File Manager				▪	▪
6.0 Open Text Files and Images in Spot	▪	▪	▪	▪	▪
6.0 Custom Logo Integration – Service Providers				▪	▪
6.0 New Progress Indicator	▪	▪	▪	▪	▪
6.0 Pic Auxiliary – Open Pictures In Spot	▪	▪	▪	▪	▪
6.0 Hex Auxiliary – Hex Editor for Files	▪	▪	▪	▪	▪
6.0 Hybrid ISO Download Package Option	◻	▪	▪	▪	▪
6.0 DiskQuarantine – Block File System Errors		▪	▪	▪	▪
6.0 SafeDisk Applet – Disk Safety Features	◻	◻	▪	▪	▪
6.0 SafeRemove Applet Improvement	▪	▪	▪	▪	▪
6.0 WLAN in Self-Booting Variants				▪	▪
6.0 Network Shares in Self-Booting Variants				▪	▪
6.0 Intel NICs – Advanced Support	◻	▪	▪	▪	▪
6.0 Intel SATA/NVMe-Merged Controllers	◻	◻	▪	▪	▪



Ver. New Features in HDSHredder 6

	FE	BE	SE	PE	EE
6.0 Intel VMD – Advanced Support				▪	▪
6.0 Support for PCIe Hot-Swapping				▪	▪
6.0 Jumplist in Windows	▪	▪	▪	▪	▪

Information on Modifications

The following information pertains to modifications which do not represent features in the actual sense, yet which bring about a different or new program behavior in comparison to the previous version. Therefore, this information is specifically aimed at users of HDSHredder 5 or older versions.

CLI as Its Own Product

The command line version (CLI) has been fundamentally revised, unlinked from the development of the graphic variant, and has been outsourced as a separate product – HDSHredder CLI. As a result, it is even easier to meet the specific requirements of a CLI application, such as integration into scripts and use in the Windows Command Shell and PowerShell. We will happily provide support and advice to our customers who currently use the CLI interface of HDSHredder 5 or older and who wish to switch to HDSHredder CLI. Please contact us!

Classic Tab

HDSHredder 6 features new app versions that replace previous apps (see also "New Features"). To facilitate the transition for our users, the previous apps remain available under the new "Classic" tab, which contains the entries of the former "Quick Select" tab. The new "Quick Select" tab has been slightly redesigned and now holds the new app versions.

Note: The "Classic" tab is intended for use during the transition and will be removed after HDSHredder 6. Therefore, please use the apps in the other tabs whenever possible.

Updates, Product and License Information

The License applet in the system bar has been redesigned and, on Windows (HDSHredder/W), it now offers direct access to information in the web browser. Information includes the current license status, program changes and improvements (ChangeLog), or the

applicable update and upgrade options (Upgrade Configurator). In HDSHredder/S and HDSHredder /L, a corresponding QR code is displayed which can be used to open the requested site on a smartphone or tablet without having to enter its link manually.

Download Options

With the introduction of a hybrid ISO as a download option, the other options have also been changed and adapted to accommodate specific types of use.

- The **self-extracting setup file (.EXE)** is intended for users who need an installation on Windows. Apart from the installation program, it also contains the Boot Setup. An ISO file is not included, yet it can be created with the Boot Setup.
- The **ZIP archive** is intended for users who do not need an installation on Windows. The Boot Setup can be accessed via the HDSHredder program interface. An ISO file is not included, as it can be created with the Boot Setup.
- The **Hybrid ISO** is intended for non-Windows users who wish to create a bootable CD or USB stick with Linux or MacOS on-board resources and without using Boot Setup. Just like the ZIP package, it does not include a Windows installation.

Changed 32/64 Bit EXE for Windows

With HDSHredder 6, the 64 bit variant has been made the standard in all areas. As a result, the names of the EXE files have been changed. The file "hdshredder.exe" now



contains the 64 bit variant. To explicitly use the 32 bit variant, choose "hdshredder32.exe".

Self-Booting With 32/64 Bit Automatic

For the self-booting variant HDSHredder/S, the start options <S> for 32 bit and <X> for 64 bit have been merged into the automatic option <S> – HDSHredder/S will be started automatically in the appropriate variant (32 bit/64 bit). Via "Additional Options" <W>, HDSHredder/S32 can also be started on 64 bit systems.

Boot Setup for 32/64 Bit

64 bit can no longer be deselected in the Boot Setup. Instead, boot files are automatically installed for both the 64 bit and 32 bit variants, provided they are available.

Note: The "hdshredder32.exe" file is necessary to create the Linux-based boot variant (HDSHredder/L). If it is not present, the boot variant HDSHredder/L cannot be created.

Direct Clearing of Service Updates

Service updates that are included in the license are indicated at the bottom right corner in the system bar when there is an online connection. By clicking on the "Service Update" tile, the download of the new version is now cleared automatically – without needing to locate your license key.

Locations of New Applets

Both new applets "Online Services" and "SafeDisk" are located on the right side of the system bar.

Locations of New Apps

- "SecureErase" and "Sanitize" can be found in the "Device-based" section under the "Quick Select" tab.
- "DiskTest" is located in the "Disk Management" section under the "Tools" tab.

Spot With New "Volumes"/"Disks" Views

The Spot File Manager now provides two views in the drive bar on the left side:

- **Volumes** – lists available drives according to their respective function, e. g. "Local Disk".
- **Disks** – assigns drives to their respective disks and arranges them according to their type, e. g. "SATA".

Spot Opens All Files (and Pictures)

In the Spot File Manager, any files can now be opened in the hex editor "Hex" or the text editor "Pad" via the context menu. The picture formats PNG, JPG and GIF can also be opened in the new image viewer "Pic" by double-clicking.

Revised Boot Setup

The options in the Boot Setup menu have been revised. The UEFI options have been replaced with a "Boot mode" drop-down element. This now allows for better handling of specific target systems, notably there is also a dedicated mode for booting on very old systems.

In addition, all available boot options (HDSHredder/S32, HDSHredder/S64 and HDSHredder/L) are now installed automatically. The boot options element presents as a straightforward display, which not only shows the available boot options, but also indicates potential causes in the event that one or more boot options are not available.

The options "Format Disk" and "Add Boot Configuration..." remain as before.

Optional Online Transmission of System Logs

In the event that you need to contact our support, the transmission of necessary log files is now easier, provided the system can connect to the internet successfully. A new option called "Upload Log" in the System applet (heartbeat monitor icon) serves as an alternative to the usual process of saving a system log to a local disk. It allows to transmit the system log online in one easy step. Upon successful transmission, you will be given a code consistent of five characters. When contacting our technicians with your description of the issue at hand, you can add this code to reference the system log.