

Introduction

Formatting a disk is one of the most common ways to erase all files from the disk. It is commonly assumed that after the format procedure, all files are erased and inaccessible, and may essentially be forgotten about.

Here is the other side of the story:

When a hard drive is erased using standard "Format" methods, the magnetic media within the hard drive (alarmingly) retains all original data. Recovering from a format, be it accidental or intentional, is usually very simple. In fact, all one needs is the proper software which is easily accessible and sometimes free, or a knowledgeable technician with the right tools, and a disk Format can be 100% **UNDONE**.

What this means:

It is common for hard drives, floppy disks, and computers to be exchanged, sold, donated, and transferred to different people or even various departments within an organization. When this happens, all files that were supposedly cleaned from a hard drive by formatting or deleting are usually 100% intact, and can be easily recovered with simple, low-cost software!

With age-old recovery techniques, one can recover:

- Passwords
- Pictures, movies, sounds, and other multimedia files
- Web browsing history
- Private e-mail messages
- Valuable corporate secrets
- Personal files or confidential letters
- Bank or credit card information
- Confidential user Information

Conclusion:

If personal or corporate security is at all of interest, one cannot trust the standard method of cleaning a drive (i.e. by formatting a drive or deleting personal files) as a method of protection. An independent, more secure method must be used to ensure that your personal and corporate secrets are not at risk! This is where [DriveScrubber](#) comes in.

[Return to DriveScrubber Main Help Topics](#)

Product Overview

PURPOSE

iolo technologies DriveScrubber is a product designed to remove all traces and remnants of information from your hard drive. DriveScrubber eliminates data from every area of the hard drive, including all boot, file, operating system, and even unused space locations. Every bit, byte, sector, cluster, and track of the drive is overwritten and all data and files are destroyed beyond recovery (without damaging the disk itself). After using DriveScrubber, the drive appears "as new" and can be re-used as such, without fear of disclosing personal information or any data that previously resided therein.

DriveScrubber is equipped with the latest in [data-wiping technology](#) which makes it easy and affordable for anyone from home users to mission critical government and military agencies to ensure the type of data security that today's privacy-conscious environment demands.

KEY FEATURES

DriveScrubber is equipped with the following features:

- Data removal techniques specially designed to eradicate data, making future recovery completely impossible, even by the most sophisticated methods.
- Sector over-write algorithms that exceed standards set forth by the specifications issued from the United States Department of Defense and other international military and governmental agencies.
- The ability to verify all sector overwrites performed, thus assuring that all data is gone from a technical level, once and for all.
- Logging features that meet government and military data destruction record specifications, providing an easy method of keeping track of processed drives.
- Compatibility with all hard drives and drive interfaces (SCSI, IDE, EIDE, etc.), regardless of installed file systems (FAT12, FAT16, FAT32, NTFS, FFS, EXT2FS, etc.), and even if there is NO File System on the drive! ANY drive formatted or unformatted using ANY operating system can be cleaned; Windows 3.x, 95/98/ME, and NT/2000/XP, as well as Linux, Unix, and Macintosh.

 **Note:** DriveScrubber will not boot on a Macintosh computer or certain Unix systems. However, by removing a Macintosh or Unix drive and connecting it to an x86/Intel-compatible PC, you can then use DriveScrubber to wipe that drive.

[Return to DriveScrubber Main Help Topics](#)

System Requirements

To use DriveScrubber, the following items are required:

- Any x86/Intel-compatible PC
- Floppy drive
- A hard drive attached by internal cable to the above system

DriveScrubber is a "DOS" based application, and can be run on any Intel-based PC without the need for a pre-installed operating system. If a hard drive is detected by the PC's BIOS or CMOS it will be available to DriveScrubber. DriveScrubber uses intricate, low-level processes to read the number of drives attached to the system. This ensures that setup and operation is as simple as possible.

 **Note:** You cannot run DriveScrubber from a Windows-based Command prompt or DOS prompt. You must boot the computer specifically using DriveScrubber's floppy disk. A form of DOS is included on the bootable [floppy diskette](#).

[Return to DriveScrubber Main Help Topics](#)

Installing DriveScrubber

If you don't already have a bootable DriveScrubber floppy diskette, you may create one using the following methods:

Installing from the DriveScrubber CD

Insert the DriveScrubber installation CD into a PC running Windows 95 or above and installation should begin automatically. If installation does not begin, select **START** with your mouse and then select **RUN**. Type: **d:\setup.exe** and then select **OK** (where "d" is the letter of your CDROM).

Installing from a downloaded DriveScrubber installation file

If you have downloaded DriveScrubber from a website, locate the DriveScrubber.exe installation file and Double Click to start the installation. Typically, when downloading a file, it is good practice to download the files where they will be easy to locate on your system (i.e., on the 'Desktop' of your computer).

The installation screen will appear recommending that you close all other open applications. Read, follow the instructions, and proceed with the installation by selecting the button labeled "Next" (or to cancel the installation select the "Cancel" button).

CREATING A BOOTABLE DISKETTE

To create a bootable floppy diskette with the DriveScrubber executable on it, start the DriveScrubber bootable floppy creator by selecting its item located in the corresponding program group in the Windows Start Menu. By default, DriveScrubber's program group in Windows is "Start >Programs->iolo DriveScrubber->Create DriveScrubber Bootable Floppy".

- Once the bootdisk creator is started, you will have the option of creating a floppy on the A: drive or the B: drive.
- Selecting "Install DriveScrubber Now" will begin the process and a prompt will appear to insert a formatted floppy into the appropriate drive.
- Selecting "Ok" will initiate the creation of the bootable DriveScrubber floppy.
- Once the process completes:
 - Select "Reboot Now" to restart your machine and boot from the DriveScrubber floppy
 - Select "Create another disk" to make another bootable DriveScrubber floppy disk
 - Select "Exit" to exit the disk creator.

Once the bootable diskette is created you can [begin using DriveScrubber](#) to wipe drives on a computer.

[Configuring DriveScrubber to work for you](#)
[Return to DriveScrubber Main Help Topics](#)

Starting DriveScrubber

To start DriveScrubber, one needs a DriveScrubber [floppy diskette](#), a floppy drive, and a hard disk or floppy disk to wipe.

DriveScrubber may only be run in DOS mode and the computer must be booted from the DriveScrubber floppy diskette. Simply insert the DriveScrubber diskette into the floppy drive, and turn on the computer. Once the computer is booted, DriveScrubber will be started automatically.

 **Note:** If the DriveScrubber application does not automatically boot when you start your computer, ensure that your computer's BIOS or CMOS is set to boot from the **floppy drive first**.

 **Note:** You cannot run DriveScrubber from a Windows-based Command prompt or DOS prompt. You must boot the computer specifically using DriveScrubber's floppy disk. A form of DOS is included on the bootable [floppy diskette](#).

DriveScrubber's Initial Screen

The first screen that is displayed shows a brief description of the DriveScrubber product. To proceed, press **ENTER**.

Licensing Details Screen

If the copy of DriveScrubber that is running has not been licensed yet, the next screen will display information about the DriveScrubber trial period, and how to license the product.

From this screen you can print an order form by pressing the **Alt** and **P** keys. You may also enter licensing information received following your purchase of the product by pressing **Alt + L**.

 **Note:** At any time during the DriveScrubber configuration, you may use the **ESC** key to interrupt and/or exit the program.

Press **ENTER** to proceed to the next screen which will allow you to [select the Drives to Wipe](#).

[Configuring DriveScrubber to work for you](#)
[Return to DriveScrubber Main Help Topics](#)

How To Purchase DriveScrubber

We sincerely hope that DriveScrubber proves itself a valuable addition to your set of system tools. We've put together some information to make it easy for you to purchase a licensed copy of the software or upgrade your existing license in a fast and convenient manner.

To purchase a license instantly and securely online, with immediate download delivery available, go to <http://www.iolo.com/order> or call iolo technologies toll-free at 1-877-239-4656.

What do I get if I purchase?

- Free unlimited access to web, e-mail, telephone and fax based technical support privileges.
- Free upgrades to all minor updates (e.g. 2.0 to 2.1 to 2.2, etc.) and all service releases / fixes.
- Notification of and generous discounts on all new major version upgrades (e.g. version 2.0 to 3.0).
- Great software created by people dedicated to providing quality products to their customers!

How much does it cost?

- Personal Edition: **\$29.95 (SRP)**
- Professional Edition: **\$89.95 (SRP)**
[What's the difference between these versions?](#)

Instant and secure web-based ordering using a credit card

For purchasing information go to <http://www.iolo.com/order>

Toll-free by telephone (8:00 AM-5:00PM, Mon-Fri, PST)

- U.S. Orders: 1-877-239-IOLO
- Non U.S. orders: 1-626-793-3993

By mail or fax

[Click here to access a printable order form](#)

You may fax or mail your order to us using the following information. Product is delivered when payment is received.

Fax to: **1-626-793-1554**

Mail / make checks payable to:

iolo technologies, LLC
145 North Sierra Madre Blvd.
Suite 1
Pasadena, CA 91107
USA

I don't live in the United States. Do you have a reseller in my area?

We probably do. Please either contact us by email at sales@iolo.com, or visit our website at <http://www.iolo.com/order> for more information.

Can I use a purchase order?

Yes, we accept corporate purchase orders, however we may request credit references prior to final approval and delivery. Our terms are net payment within 30 days of delivery. Purchase orders are encouraged for larger quantity orders. If a purchase order is submitted for an amount under \$100.00 there will be an additional \$20.00 processing and handling fee added to the total due. Please note that for amounts less than \$100.00 credit card payments are preferred. For more information please contact iolo technologies sales department at 1-877-239-4656 or e-mail sales@iolo.com

[How do I upgrade my copy of DriveScrubber?](#)

[How do I license DriveScrubber for more than one computer?](#)

I'd like to resell this product

We are always looking for resellers interested in representing our products. If you are interested in reselling DriveScrubber or any other iolo technologies product please contact us at 1-626-793-3993 or var@iolo.com.

 **Note:** Prices and availability are subject to change without notice.

[Return to DriveScrubber Main Help Topics](#)

Printable Order Form

You may use this order form for faxing or mailing orders for DriveScrubber. To print this form, select File>Print Topic. Fax To: 1-626-793-1554 or call iolo toll-free at 1-877-239-4656 (US) or 1-626-793-3993 (non US).

ALL relevant information below is required to process your order.

Company Name (if applicable): _____

Your Name: _____

Phone Number: _____ FAX Number: _____

E-Mail Address (please verify!): _____

Street Address: _____

City: _____ State/County: _____ Zip/Postal: _____

Where did you learn about DriveScrubber? _____

I would like to purchase:

Copy(s) of **DriveScrubber Personal Edition** at **\$29.95** per copy or priced according to the [multi-computer matrix](#) if more than 4 copies.

Copy(s) of **DriveScrubber Professional Edition** at **\$89.95** per copy or priced according to the [multi-computer matrix](#) if more than 4 copies.

Upgrade license(s) from **DriveScrubber Personal Edition to Professional Edition** at **\$70** per upgrade license or priced according to the [multi-computer matrix](#) if more than 4 licenses.

Delivery Method (check all the apply):

Instant e-mailed invoice with User ID and Serial number: **FREE**

Postal delivery: \$10.00 for US orders, \$15.00 all others. Please allow up to 10 days for US and 20 days for all others.

I would like to pay using:

MasterCard / Eurocard Visa American Express Discover

Cardholder's Name: _____

Credit Card Number: _____ Exp: _____

I am enclosing a check or money order **paid in US Dollars, drawn on a US Bank, and payable to iolo technologies, LLC.**

Please FAX to (626) 793-1554, or mail to 145 N. Sierra Madre Blvd., Suite 1, Pasadena, CA 91107

There is a \$20.00 processing fee for company purchase orders under \$100.00 requesting net payment terms. Checks or money orders must be paid in US dollars and drawn on a US Bank. Orders are processed Monday through Friday, excluding US holidays. Please allow 24 hours for order processing. Prices and availability are subject to change without notice.

[Purchasing information](#)

How To Obtain Product Support

If ever during the course of your use of this product you require assistance beyond this documentation, please do not hesitate to contact iolo technologies using the following information:

Web based Sales: <http://www.iolo.com/order>

Web based Support: <http://www.iolo.com/support>

Customer Service Phone: 626-793-3993

Technical Support Phone: 626-793-0506

[Return to DriveScrubber Main Help Topics](#)

Selecting Drives To Wipe

This screen allows the selection of the drive(s) that need to be wiped. Simply use the up and down arrow keys on your keyboard to choose the drive or drives that you wish to wipe, and press the **SPACE** bar to toggle their selection. An **X** character near a corresponding drive means that the drive will be included in the wiping process.

At this screen, press **ENTER** to continue to the [Wiping Methods](#) screen. Press the **BACKSPACE** key to go back to the Trial screen.

[Configuring DriveScrubber to work for you](#)
[Return to DriveScrubber Main Help Topics](#)

Specifying A Data Wiping Method

This screen enables you to select the method to used when wiping your drive. These wiping methods each have different features, and a decision should be made based on which of these features are necessary for your drive wiping and security requirements. As a general rule, the more secure the wiping process, the longer it will take to complete, and vice versa.

Single Overwrite

This method is the fastest, and blocks all software-based methods for recovering data. This includes sector readers, hex editors, undeletion and unformatting software, as well as others. This method writes the hexadecimal "Zero" code to each sector of the drive, thereby effectively eradicating all data and preventing recovery from software-based recovery methods.

Seven Overwrite

While software methods for recovering data are the most widely used, there are still other ways for recovering deleted and/or formatted data. Some of these methods involve thousands of dollars worth of equipment and tools such as electron microscopes and other elaborate devices. Remember, if the information contained on your drive is valuable enough to someone else, the risk of illegal recovery is significant, regardless of the costs involved.

For security efforts that require the highest level of attention to detail, DriveScrubber includes a data elimination algorithm which is compliant with the US Defense Department Standard 5220.22. This involves seven exhaustive overwrites of all sectors of the drive, ensuring that no attempted method will be able to recover the data, be it hardware or software based, and regardless of its level of sophistication.

Gutmann's Maximum Security Overwrite

There are some organizations that look to private standards when determining their data elimination methods. Some private standards are even more rigorous than those of the United States Department of Defense. One such protocol is the called Gutmann's Security Standard, which mandates that the sectors of the magnetic media must be over-written a total of thirty-five times, using certain random patterns to ensure that all data is permanently removed from the hard drive, once and for all. One drawback of this method is that, due to the complicated operations involved, it requires a much longer time to wipe a hard drive than the standard 'Single Overwrite' and 'Seven Overwrite' methods.

Use the arrow keys to move over the method that you wish to use. Press the **SPACE** bar to select this option, and **ENTER** to proceed to the [Wiping Options](#) screen.

[Configuring DriveScrubber to work for you](#)
[Return to DriveScrubber Main Help Topics](#)

Specifying Wiping Options

This is the screen used for selecting Wiping Options. These are options that change the way DriveScrubber operates before, during, and after it wipes a drive or set of drives. These items allow for extra security, safety, or logging features. Use your arrow keys and space bar to move amongst and select the available options.

Once options have been selected you can [Start the Wipe](#) process.

Verify Wiping

This option enables a Write Verify action for every sector over-written. This means that whenever a sector of the hard drive is erased, that sector is read one last time to make sure that it has been erased properly. Note that this option **increases the time** required for wiping.

 **Note:** Increase in time is relative to the size of the drive.

DEFAULT: **OFF**

Wipe from end-to-beginning of drive

In a normal wipe operation, the drive is erased starting at the first possible sector (Or the Zero Sector), and the writing is continued until the end of the drive is reached. With this option selected, the writing process is begun at the LAST sector in the drive, and is continued backward until it reaches the FIRST sector.

One effect of this is that the drive partition information is not destroyed until very late in the wiping process. The Master Boot Record (MBR), which is the part of the drive that contains partition information, is located very close to the beginning of the drive. This means that it is much easier to cancel the wiping process without losing all partition information, since the MBR is one of the last areas of the drive to be wiped. Retaining partition information on a drive will often still allow you to boot from it and even access some files, even if another part of the drive has been wiped.

DEFAULT: **OFF**

Perform an additional final wipe with all zeroes

This provides added security to the wiping process. Regardless of other options or methods selected, this option will proceed with a Final write of "0" to each sector of the hard drive. When using wiping methods other than the standard Single Overwrite method, random data or a specific pattern may be used to overwrite the drive. In these cases, this option finishes the wipe by filling the drive with zeroes. In addition to extra security, performing a final zero-character wipe to the drive surface effectively eliminates any unique patterns that may have been left on the drive, potentially linking the source of the wipe to DriveScrubber.

DEFAULT: **OFF**

Save US Department of Defense style log file

Most organizations require standards to be followed when handling data. One such standard is in the way the "purging" of magnetic storage systems is performed and logged. Detailed logging features are required by the US Department of Defense, and DriveScrubber includes these features.

DEFAULT: **OFF**

Allow interruption of wiping process

This option, enabled by default, allows you to pause, resume, and/or stop the wiping process after it has been started. This feature may be required to halt a wiping process in an emergency, or in order to change the options associated with the wipe process and resume. If this option is disabled, it **WILL NOT ALLOW** you to halt the wiping after it has begun.

 **Note:** If the wiping process is interrupted, your hard drive may still contain recoverable files and data.

DEFAULT: **ON**

Enable option to skip drive currently being wiped

This option allows you to skip the current drive when wiping, and is designed to speed-up certain automated multiple hard drive wiping procedures via allowing for potential manual intervention.

DEFAULT: **ON**

Starting The Wiping Process

In the final confirmation screen before the wipe begins, the list of drives to be wiped will be displayed in the "Drives to be wiped" section of this screen. The specified wiping method is displayed below this section. This screen is the final opportunity to assess the operations one final time before initiating the data destroying procedure.

***** CAUTION!!! *****

**THIS IS THE FINAL CONFIRMATION SCREEN BEFORE THE SELECTED DRIVE(S) WILL BE WIPED OF ALL DATA.
PLEASE EXERCISE EXTREME CAUTION BEFORE PROCEEDING!**

To start wiping, simultaneously hold down the **Ctrl**, **Alt**, **Shift** and **W** keys, and then release them.

Once the wiping process has begun, you will be presented with a [synopsis of information related to the procedure](#).

[Configuring DriveScrubber to work for you](#)
[Return to DriveScrubber Main Help Topics](#)

Viewing And Printing Logs

When the wiping operation is complete, you are then able to view or print a log report. To view/print the log, simply press the **V** key.

From the log viewer, you may print the log by pressing the **ALT** and **P** keys. This will print the entire log to the LPT1 printer port. An external printer must be **directly connected** to the printer port of your computer in order to print logs directly from DriveScrubber (printers connected via network are not available).

If you press **N** to indicate that you do not wish to wipe more drives, DriveScrubber will exit and the DOS command prompt will be displayed.

[Configuring DriveScrubber to work for you](#)
[Return to DriveScrubber Main Help Topics](#)

Licensing Agreement

Use of DriveScrubber for any period of time binds you to this license agreement. Please read and understand it before using the software.

DRIVESCUBBER LICENSE AGREEMENT

IOLO TECHNOLOGIES, LLC DISCLAIMS ALL WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SOFTWARE OR DOCUMENTATION. SHOULD THE PROGRAM PROVE DEFECTIVE, THE PURCHASER ASSUMES THE RISK OF PAYING THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR, OR CORRECTION AND ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES. IN NO EVENT WILL IOLO TECHNOLOGIES, LLC BE LIABLE FOR ANY DAMAGES WHATSOEVER (INCLUDING WITHOUT LIMITATION TO DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION AND THE LIKE) ARISING OUT OF THE USE OR THE INABILITY TO USE THIS PRODUCT EVEN IF IOLO TECHNOLOGIES, LLC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN PARTICULAR, IOLO TECHNOLOGIES, LLC SHALL HAVE NO LIABILITY FOR ANY DATA STORED OR PROCESSED WITH THIS SOFTWARE, INCLUDING THE COSTS OF RECOVERING SUCH DATA. AS A RESULT, THIS SOFTWARE AND DOCUMENTATION ARE LICENSED "AS IS" AND YOU, THE LICENSEE, ARE ASSUMING THE ENTIRE RISK AS TO ITS QUALITY AND PERFORMANCE.

Information in this document is subject to change without notice and does not represent a commitment on the part of Iolo Technologies, LLC. The software described in this document is furnished under this license agreement. The software may be used or copied only under the terms of the agreement. It is against the law to copy the software on any medium except as specifically allowed in the license agreement.

USE OF THIS PRODUCT FOR ANY PERIOD OF TIME CONSTITUTES YOUR ACCEPTANCE OF THIS AGREEMENT AND SUBJECTS YOU TO ITS CONTENTS.

US GOVERNMENT RESTRICTED RIGHTS

Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subdivision (b)(3)(ii) of the Rights in Technical Data and Computer Software clause at 25.227-7013. Contractor / manufacturer is:

IOLO TECHNOLOGIES, LLC
145 North Sierra Madre Blvd., Suite 1
Pasadena, CA 91107

Copyright and Trademark Acknowledgments

DriveScrubber is copyright 2001-2002, Iolo Technologies, LLC. The DriveScrubber software, name, logo, documentation, and the Iolo Technologies, LLC logo are trademarks of Iolo Technologies, LLC.

Windows, Windows 95, Windows 98, Windows 2000, Windows Millennium, Windows Me, Windows XP, and Windows NT are trademarks of Microsoft Corporation. All other trademarks are property of their respective owners.

[Return to DriveScrubber Main Help Topics](#)

Welcome To DriveScrubber

[How To Purchase DriveScrubber](#)

General Help Topics

[Licensing Agreement](#)

[Introduction](#)

[How to purchase DriveScrubber](#)

[Differences between DriveScrubber Personal and Professional Editions](#)

[How to upgrade your copy of DriveScrubber](#)

Learn about DriveScrubber

[Product Overview: What is DriveScrubber and what can it do for me?](#)

[System Requirements](#)

[How to obtain product support](#)

Using DriveScrubber

[Getting Started: Using DriveScrubber for the first time](#)

Configuring DriveScrubber to work for you

[Installing DriveScrubber](#)

[Starting DriveScrubber](#)

[Selecting drives to wipe](#)

[Specifying a data wiping method](#)

[Specifying wiping options](#)

[Starting the wiping process](#)

[Details and options available during the wiping procedure](#)

[Viewing and printing logs](#)

Licensing DriveScrubber For More Than One Computer

DriveScrubber is licensed on a "per-computer" basis. This means that you must purchase a license for each separate computer that it will be installed or used on, regardless of the number of people using the computers. Licenses are only sold in the blocks designated below. If you require any assistance before making a decision on a multi-computer license please do not hesitate to contact us at **1-877-239-4656** or sales@iolo.com.

[What are the differences between DriveScrubber Personal and Professional?](#)

Multi-Computer Pricing Matrix

Personal Edition

Number of Computers	Total Price
1-4	\$29.95 <i>each</i>
Up to 5	\$99.95
Up to 10	\$189.95
Up to 25	\$449.95
Up to 50	\$779.95
Up to 100	\$1124.95
Up to 250	\$2474.95
Up to 500	\$3374.95
Up to 1000	\$5249.95
1001+	Contact iolo technologies

Professional Edition

Number of Computers	Total Price
1-4	\$89.95 <i>each</i>
Up to 5	\$299.95
Up to 10	\$599.95
Up to 25	\$1299.95
Up to 50	\$2299.95
Up to 100	\$3399.95
Up to 250	\$6999.95
Up to 500	\$9999.95
Up to 1000	\$14999.95
1001+	Contact iolo technologies

Personal to Professional Upgrade

Number of Computers	Total Price
1-4	\$70 <i>each</i>
Up to 5	\$225
Up to 10	\$450
Up to 25	\$900
Up to 50	\$1600
Up to 100	\$2500
Up to 250	\$4750
Up to 500	\$7000
Up to 1000	\$10000
1001+	Contact iolo technologies

[Return to DriveScrubber Main Help Topics](#)

[Return to How to Purchase DriveScrubber](#)

Configuring DriveScrubber to work for you

Starting DriveScrubber

- DriveScrubber's Initial Screen
- Licensing Details Screen

Selecting drives to wipe

Specifying a data wiping method

- Single overwrite
- Seven overwrite
- Gutmann's overwrite

Specifying wiping options

- Verify wiping
- Wipe from end to beginning of drive
- Perform an additional final wipe with all zeros
- Save U.S. Department of Defense style log
- Allow interruption of wiping process
- Enable option to skip drive currently being wiped

Starting the wiping process

Details And Options Available During The Wiping Procedure

- Drive list
- Wipe method
- Progress gauge
- Estimated time to completion
- Pausing, resuming, and halting the wipe

Viewing and Printing logs

[Return to DriveScrubber Main Help Topics](#)

Differences Between DriveScrubber Personal And Professional

DriveScrubber is offered in two different versions, tailored to your security requirements:

DriveScrubber Personal Edition \$29.95 ([click here for multi-computer pricing](#))

- Protection from all software-based data recovery tools such as "unformat" or "disk recovery" software products, hex/sector/disk editors, etc.

DriveScrubber Professional Edition \$89.95 ([click here for multi-computer pricing](#))

All features and functions contained in Personal Edition, plus:

- Ability to overwrite drive data using mission-critical seven-pass US Department of Defense compliant data wiping algorithms.
- Ability to overwrite drive data using a special ultra-secure 35-pass procedure as called for in the published **Gutmann's Maximum Security** specification.
- Protection from all forms of advanced hardware-based recovery mechanisms such as specialized forensic techniques and electron microscopes
- Full compliance with US (DoD 5220.22), German, and all other known published government-level data disposal security requirements

Upgrade from DriveScrubber Personal to DriveScrubber Professional Edition \$70

How to Upgrade

If you are currently licensed as a DriveScrubber Personal Edition user and would like to upgrade to the Professional Edition, you may do so using the following steps:

1. Purchase an upgrade license. [Click here to order securely online](#), or [here](#) to see additional ordering options.
2. Enter your new licensing information. To do this, follow these steps:
 - a. To enter licensing information into the DriveScrubber bootable floppy creator application
 - i. Start the DriveScrubber bootable floppy creator
 - ii. Select the button labeled **Upgrade** from the main screen
 - iii. Select the option labeled **Enter Upgrade Licensing Information**
 - iv. Enter the User ID and Serial Number received upon purchase into the window entitled **License DriveScrubber**. [Click here for hints on entering these details properly](#).
 - b. To enter licensing information into the DriveScrubber application itself, running on an existing bootable floppy
 - i. Place the DriveScrubber floppy into your floppy drive and restart the computer
 - ii. When DriveScrubber starts, press Alt+U to initiate the upgrade licensing process
 - iii. Enter the upgrade User ID and Serial number as prompted. [Click here for hints on entering these details properly](#).

 **Note:** Prices are in US dollars. Information is subject to change without notice.

[General Purchasing Information](#)

[Configuring DriveScrubber to work for you](#)

[Return to DriveScrubber Main Help Topics](#)

Licensing DriveScrubber

Tips for successfully entering your licensing information

Below are some common mistakes that are made while attempting to license DriveScrubber:

- 1) Spaces **anywhere** in the User ID or Serial Number will result in an error.

Correct Example:

12345-DR123-1234567890

Incorrect Example:

12 345 - sh 123 - 123456 7890

- 2) The User ID may include a "-" and a number at the end. This information is necessary.

Correct Example:

johndoe@domain.com-3

Incorrect Examples:

- johndoe
- John Doe - 3
- johndoe@domain.com
- jo h nd oe @ domain .com - 3

 **Note:** If you purchased DriveScrubber from a reseller, this User ID will not appear as an email address.

- 3) The only letters in the serial number are **DP** or **DR**. Every other character is a number. The User ID is not case sensitive.

4) If your User ID appears as an email address, it **must** be the e-mail address **shown in your invoice** usually followed by a hyphen (dash) and a number. You may **not** substitute your current e-mail address for the address shown in the original invoice unless you have issued an updated User ID and corresponding serial number.

5) If after following these steps you receive a message relating to incorrect or invalid licensing information, **please re-check the above steps once again** to ensure that you are following them carefully. Please also verify that you are typing the information in **exactly** as it is shown on your invoice.

 **Note:** Your licensing information is unique to your purchase of this product. Please keep this information private and safe.

[Return to DriveScrubber Main Help Topics](#)

Details And Options Available During The Wiping Procedure

The following information is available during a drive wiping procedure

- A list of the **drives** to be wiped is displayed at all times at the top of the wiping screen.
- Listed below is the **wiping method** for this drive wipe session.
- Stretching from left to right is a graphical representation of the **progress** of the wipe. This shows at a glance how much of the wipe has been completed for the current drive.
- Below this progress bar, the disk **write method** is displayed. For hard drives, this is normally "Block" writing, and for Floppy diskettes, the write method used is normally "512 byte sectors".

After a moment, below the disk write method, additional information is displayed.

The time to write one "pass" is displayed in seconds, as well as a size for each pass. The amount of data that is able to be wiped during one second intervals is also displayed for quick reference. Finally, an estimated time to finish is also visible.

Notes about wiping different types of drives

1. As a general rule, newer drives will be able to complete a wiping operation much faster than older drives.
2. The speed of the motherboard and CPU has a direct effect on the speed of the procedure
3. Most SCSI drives will be faster than their IDE/EIDE counterparts, provided they are formatted using standard 32 sector-per-track framework.
4. Floppy drives will be much faster when only a single overwrite pass is used. Any additional writing or reading during the procedure will exponentially decrease the speed thereof. The mechanics inside floppy drives that facilitate reading and writing are **much slower** than those in hard drives, and each extra "step" incurs additional mechanical action.

To cancel the current drive and move to the next drive in the list to wipe, press the **ALT** and **S** keys at any time during the wipe process.

If you wish to cancel the entire operation and return to the DOS prompt, press **ESC** at any time during the wipe process.

Once the wipe process is complete, you can [View and Print the Log](#) file if this option was chosen in the [Select Wiping Options](#) screen.

[Configuring DriveScrubber to work for you](#)
[Return to DriveScrubber Main Help Topics](#)

How To Upgrade Your Copy Of DriveScrubber

Note: If you are looking for information on upgrading from DriveScrubber Personal Edition to Professional Edition, [click here](#).

One of the best ways to keep your software investment in top shape is to regularly check for and install available product updates. Software updates address incompatibility issues, add features, and expand existing functions and is an important responsibility of owning a computer. Unfortunately, the process of checking for and obtaining updates to your favorite software is often plagued with inconvenience and time-consuming searching, thus most people subscribe to an "if it isn't broken, don't fix it" mentality with regards to keeping their software up to date.

To combat the problems normally associated with keeping a software product up to date, iolo technologies has developed an extremely convenient and easy to use tool called **iolo WebUpdate™**. WebUpdate was created in order to provide owners of iolo products with an extremely easy to use and convenient solution when it comes to product updates. WebUpdate can automatically connect to an iolo update server using the Internet and check for the existence of available product updates based on the version of the product you are currently using. If updates are found, WebUpdate lists them with descriptions, and allows you to automatically download them to and install them on your computer, seamlessly and painlessly replacing your existing version with the very latest available. Additionally, WebUpdate always remembers how long it's been since it last checked for available updates and can be set to remind you when an update is available, and even automatically perform the update process, every specified amount of time. With iolo WebUpdate, the process of staying up-to-date becomes as simple as clicking a few buttons!

Using the WebUpdate tool

The WebUpdate tool is accessed by selecting the button labeled **Help**, and then selecting the option labeled **Check for product updates**, located on DriveScrubber's main screen. Once the main WebUpdate screen appears, you must select the button labeled "Next" to connect to an iolo update server and check for any available updates. WebUpdate will then list any available updates and their description.

Note: If you have not registered DriveScrubber with iolo technologies yet, you will be presented with a screen that prompts you to do so before connecting to an update server. Registration is highly recommended, but not necessary.

Configuring WebUpdate options

If you would like to modify the options related to the way WebUpdate operates, select the button labeled Options while within the WebUpdate wizard. This will display a dialog with WebUpdate's modifiable preferences. For more information on WebUpdate's options see [WebUpdate: Options](#).

Downloading Updates

If updates are available, select the button labeled "Next" to begin downloading them. You will be presented with a status gauge as well as the estimated time it will take to complete the download process.

Installing Updates

Once all of the updates are downloaded, select the button labeled "Install Updates" to replace your existing version of DriveScrubber with the newly downloaded update files.

Completing the Update

Once DriveScrubber has been successfully updated, select the button labeled "Exit and Restart" to close down the currently running version of DriveScrubber and restart with the newly updated version.

Note: This process may take up to a minute and your computer may appear to have stopped responding during this time. Please be patient and do not interrupt this process.

[Return to DriveScrubber Main Help Topics](#)
[Return to How to Purchase DriveScrubber](#)

WebUpdate: Options

Automatically Check for Updates Every X Days

Using this option you can modify two elements of the WebUpdate tool:

- 1) To toggle WebUpdate's automatic checking and reminder system, uncheck the box labeled **Automatically check for updates every....** If this box is unchecked, WebUpdate will no longer remind you when it has been a certain amount of time since you have last checked for product updates.
- 2) To adjust the amount of days WebUpdate waits before checking for new updates, enter a new value in the box labeled **Automatically check for updates every....** The minimum amount of days WebUpdate will wait is one day, and the maximum it will is 360 days.

Connect using a Proxy Server

If you or your company uses a proxy server to access the internet you will need to specify this before using WebUpdate. Use the following steps to set up WebUpdate for use via a proxy server:

- 1) Select the button labeled **Options** from the main WebUpdate wizard
- 2) Check the box labeled **Connect using a Proxy Server**.
- 3) In the box labeled **Proxy Server**, specify the server name or address
- 4) In the box labeled **Proxy username**, specify your username for use with the proxy server
- 5) In the box labeled **Password**, specify your password for the proxy server
- 6) Select the button labeled **OK**.

[Return to DriveScrubber Main Help Topics](#)

[Return to How to upgrade your copy of DriveScrubber](#)

