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O&O SafeErase



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About O&O SafeErase 16

Welcome to O&O Software. We are pleased that you have chosen O&O SafeErase, our solution to securely delete your sensitive data.

There are many reasons for deleting data securely. It becomes very important to remove data completely, for example, if you want to sell your old computer, or give away a hard drive or memory card. You also need to be careful when you want to get rid of your spent company computer or return it to the leasing company. Formatting the volumes is not enough to deleting data securely. Data spies will have a feast while restoring your personal data, e.g. pictures, Emails or your financial data.

O&O SafeErase is the solution to securely delete sensitive data and therefore offers valuable data protection. O&O SafeErase does not simply delete files, but it destroys them using recognized and recommended methods. You can make sure that your private or business data will not be seen by anybody unauthorized.

The deletion processes employed by O&O SafeErase you can choose from various algorithms to delete files. Methods are offered, which are recommended and used by the US Department of Defense (DoD) and the German Federal Office of Information Security (BSI). In other words, the highest standard in security.

Hackers nor data spies stand a chance to restore your data once it has been deleted with O&O SafeErase.

After using O&O SafeErase on your computer it can be easily sold, given away, or recycled and feel safe about the fact that no data will be reconstructed or accessed.

We are happy to assist you with questions about the use of our products.

Yours O&O Software

www.oo-software.com

Note:

Please bear in mind that data deleted with O&O SafeErase **cannot** be restored, even special restoration software cannot revoke the process! Please make sure that before you securely erase the data, you really want to delete it or have it stored at a different place as a backup.

Installation, licensing and uninstall

The installation of O&O SafeErase is very simple. Please follow the steps below:

1. Turn on the computer on which you would like to install O&O SafeErase.
2. Login as a local Administrator.
3. Insert the data medium with the required software in its respective disk drive, e.g. your CD-ROM drive, or start the installation file provided (SETUP.EXE).
4. Please follow the installation guide and confirm the End-User license Agreement (EULA). Please read it carefully before the installation - it is binding.
5. To complete the installation of the program, please restart your computer, if you have not been prompted to do so already.

Information about licensing

Note:

In order to activate the product after installation or to gain access to the Full Version at a later time, you must possess a valid license key. This license key is also called a registration code, serial number, or product ID.

O&O SafeErase needs to be licensed per computer; in other words, you have to purchase a license for each computer where you want to employ O&O SafeErase.

If you do not enter a valid license key, you will only be able to use O&O SafeErase as a trial version with a limited functionality.

If you would like to implement O&O SafeErase in your company or as a technician for your customers, then please contact one of our resellers or our Sales Department.

Enter license

The dialogue for registration always appears automatically at the start to guide you if you are using an unregistered version or have entered the registration code incorrectly.

1. The registration wizard allows for a simple registration process.
2. When you select the option **I want to enter my license**, a dialog box will appear where you can enter the registration code you received when purchasing the software.
If you have purchased the **download version** of the software, please enter the license information (name, company and license key), just as they are written in the confirmation E-Mail you received.
If you have purchased the **box version** of the software, please enter the license key as it is written on the license card included. In addition, please enter your name and if needed your company.
3. Please make sure that you do not confuse the digit "1" with "l" or enter any empty spaces

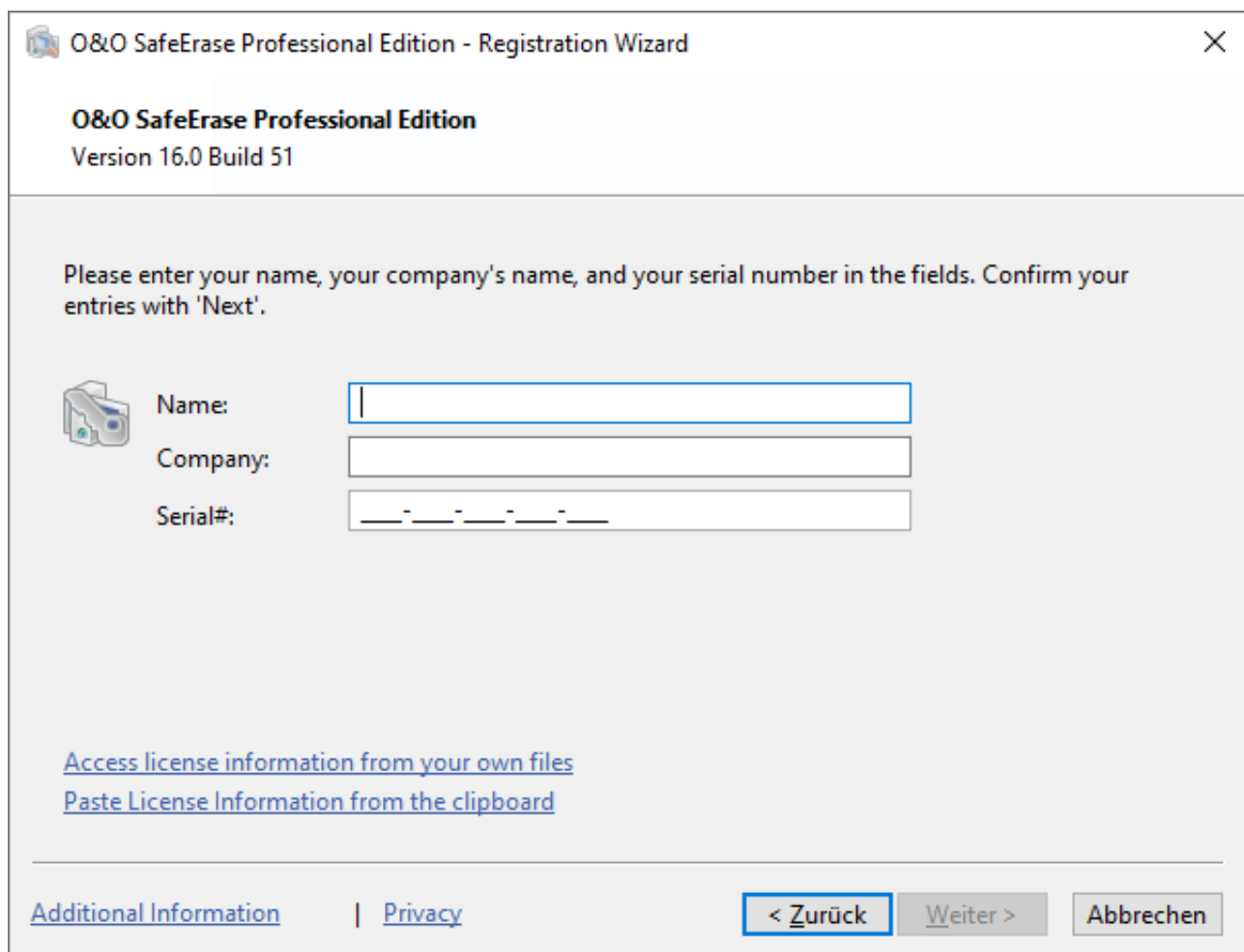
where they don't belong.

4. Press **Next** to save the registration data or **Cancel** to leave the dialog window without saving the data.
5. When you have correctly entered the license code you will receive a confirmation in the dialog window.

If you encounter problems while entering your license key, please contact our Support: support@oo-software.com

Note:

If you do not enter a valid license key, you will only be able to use O&O SafeErase as a trial version with a limited functionality.

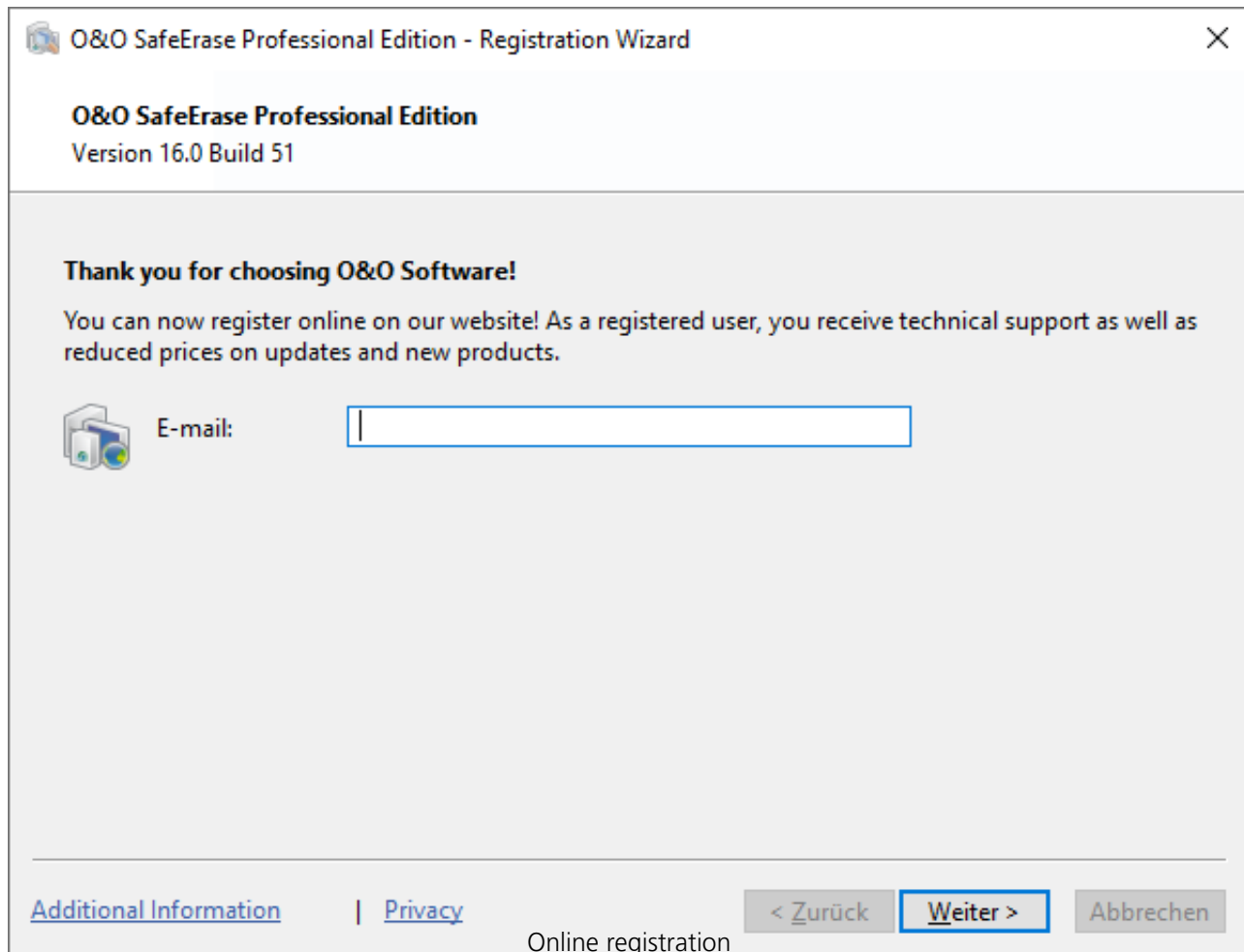


The screenshot shows the 'O&O SafeErase Professional Edition - Registration Wizard' window. The title bar includes the application icon and the text 'O&O SafeErase Professional Edition - Registration Wizard' with a close button. The main content area has a header 'O&O SafeErase Professional Edition Version 16.0 Build 51'. Below this, a message reads: 'Please enter your name, your company's name, and your serial number in the fields. Confirm your entries with 'Next'.' There are three input fields: 'Name:' (a single-line text box), 'Company:' (a single-line text box), and 'Serial#:' (a text box with a dashed line indicating a serial number format). To the left of these fields is a small icon of a computer. Below the input fields, there are two links: 'Access license information from your own files' and 'Paste License Information from the clipboard'. At the bottom, there are three buttons: '< Zurück' (highlighted with a blue border), 'Weiter >' (disabled), and 'Abbrechen' (disabled). On the left side of the bottom bar, there are links for 'Additional Information' and 'Privacy' separated by a vertical line.

Registration wizard: Enter the license key

Online registration

Once a license is successfully entered, a prompt will appear regarding online registration if your license has not already been registered online.



O&O SafeErase Professional Edition - Registration Wizard

O&O SafeErase Professional Edition
Version 16.0 Build 51

Thank you for choosing O&O Software!

You can now register online on our website! As a registered user, you receive technical support as well as reduced prices on updates and new products.

E-mail:

[Additional Information](#) | [Privacy](#)

[Online registration](#)

< Zurück Weiter > Abbrechen

What are the advantages of online registration?

Online registration gives you the benefit of having your customer data kept safely in our files, which means we can provide you with even better service. If, for example, you accidentally lose your license key, we can quickly resend it to you without any problem. The license key is needed for using the full version of a program, getting updates, and for reinstalling the program when you make a new setup of your computer.

Further advantages will let you:

- Be supplied with the latest information about our products
- Make free updates on new versions of purchased items (minor updates)
- Upgrade to a new version at a special discount price (major update)
- Obtain support from our customer service

How do I register online?

If O&O SafeErase was purchased on our Online Shop, you've automatically registered with us. If O&O SafeErase purchased at a retailer, you will be asked if you want to register while entering the license information. You then have the option of either registering immediately or at another time. All you'll need is a functioning Internet connection and a valid license key.

You may also complete the registration form right here:

<http://www.oo-software.com/register>

Just return the completed online form by clicking "Send" and you'll be eligible to take full advantage of our O&O Customer Service.

Updates

Tip

Information about your installed program version and the license data (if you have it) can be found under **Update & Info**.

Note

You won't be able to use the Update function if you're using O&O SafeErase as a component of a Boot CD, such as O&O BlueCon.

Uninstall

To remove O&O SafeErase from your PC, please follow the instructions below:

1. Open the **Control Panel** in the Windows start menu and then click on **Software**.
2. Select **O&O SafeErase** from the list and then click on (depending on the OS) **Uninstallation** or **Add/Remove**.
3. Confirm the uninstallation. You'll receive a confirmation notice when uninstallation is completed. When prompted, restart your computer.

System requirements

O&O SafeErase does not specify specific requirements for the proper use of the program functions.

- The system requirement of each operating system have to be fulfilled
- Supports 32 and 64-bit operating systems
- Supports multi core processors
- .Net Framework 4.7.1
- Windows® 8 till Windows® 10 (all editions),
- Windows® Server 2012 till Windows® Server 2019 (all editions):

Supported operating systems

Operating system	Professional Edition	Workstation Edition	Server Edition
Windows® 10	yes	yes	yes
Windows® 8/8.1	yes	yes	yes
Windows® Server 2012*	no	no	yes*
Windows Server 2012 R2*	no	no	yes*
Windows Server 2016*	no	no	yes*
Windows Server 2019*	no	no	yes*

*Core installations are excluded

Supported Browser	Versions
Microsoft Edge®	20-89
Internet Explorer®	10-11
Mozilla FireFox®	60-86
Mozilla FireFox® Extended Support Release (ESR)	60-78
Google Chrome®	70-89

Access permissions

You must be a member of your system's local administrators group or possess comparable permissions in order to install and register O&O SafeErase. Domain Administrators normally already possess these permissions.

Differences between Editions

O&O SafeErase is available in three Editions:

- O&O SafeErase Professional Edition
- O&O SafeErase Workstation Edition
- O&O SafeErase Server Edition

The **Professional Edition** is the version to use for a single PC. It cannot be used on a Server operating system.

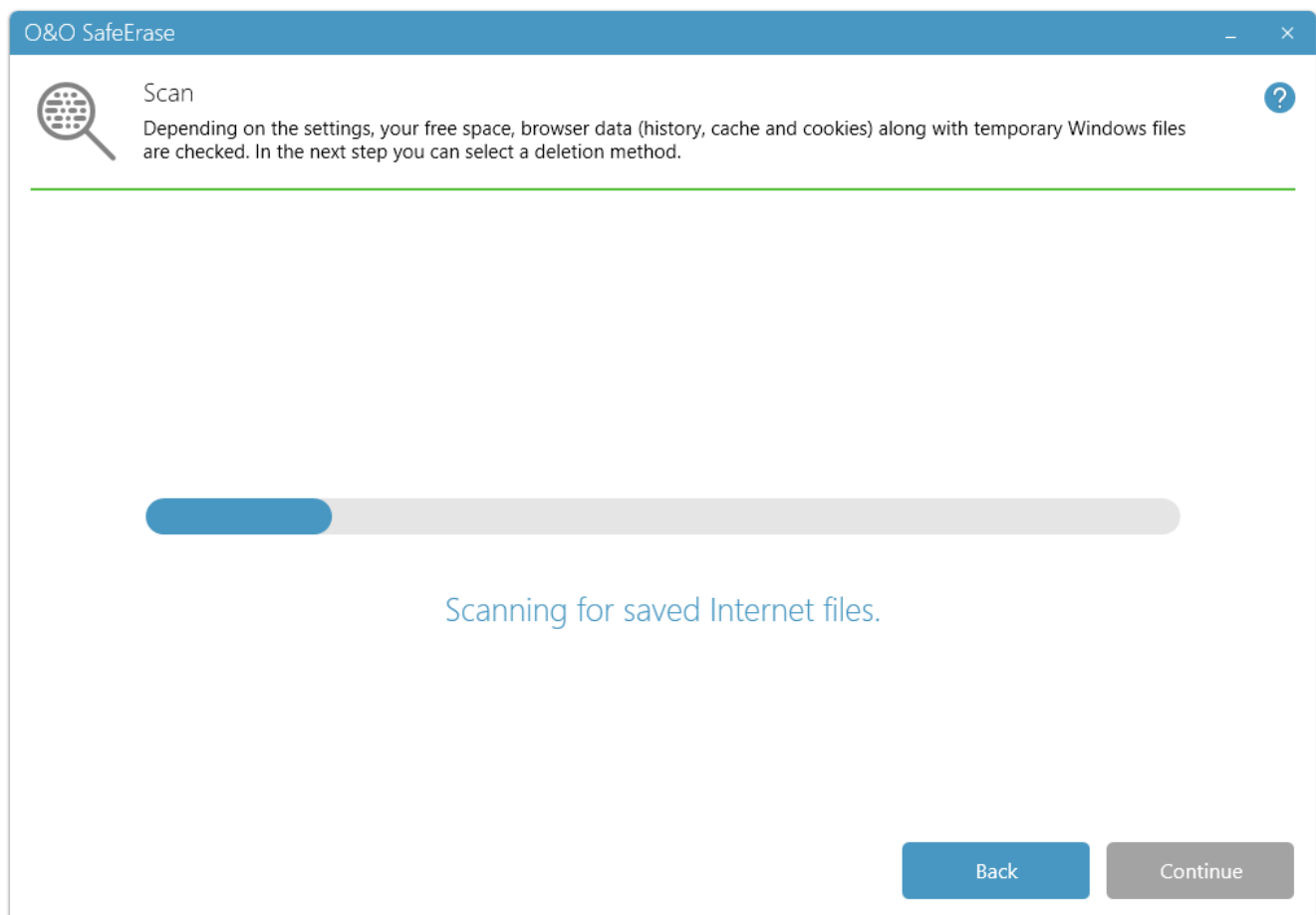
The **Workstation Edition** is intended for use on a desktop computer within a company. A special feature of the Workstation Edition is its ability to simultaneously delete free space and partitions on different physical disks. This is different from the Professional Edition, where deletion is performed successively. This allows you to save considerable time when working with large data volumes. We'll also be happy to help you use O&O SafeErase Workstation Edition across a network. Just get in touch with us and we'll show you how.

The **Server Edition** is optimized for a server and can be used on both a server as well as on a desktop computer. A special feature of the Server Edition is its ability to simultaneously delete free space and partitions on different physical disks. This is different from the Professional Edition, where deletion is performed successively. This allows you to save considerable time when working with large data volumes. We'll also be happy to help you use O&O SafeErase Workstation Edition across a network. Just get in touch with us and we'll show you how.

Scan

The Scan goes through your computer looking for files that could pose threats to your privacy. Among these are browser data, temporary Windows and program files as well as remnants of data in free space.

In Settings you can decide whether all three or only selected criteria should be applied. Please note, however, that removing one of these options could threaten your privacy.

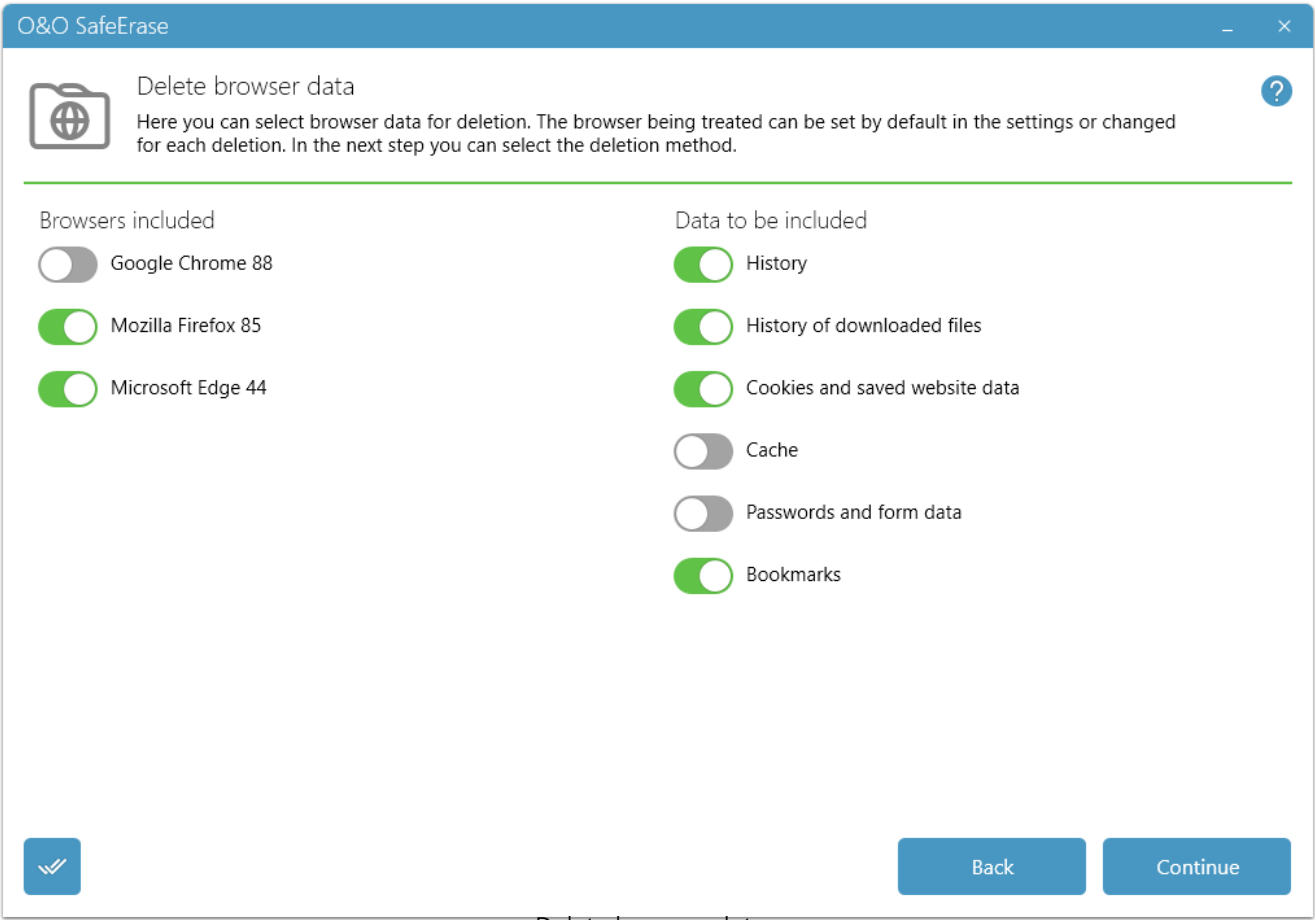


Scan

Browser data

During the scan of browser data, only the browser you selected under Standards will be taken into consideration. The scan will ignore form data, passwords, and bookmarks. History, cache, and cookies, on the other hand, will be marked for deletion because these enable a reproduction of the steps you took in the browser, thereby posing a risk to your privacy.

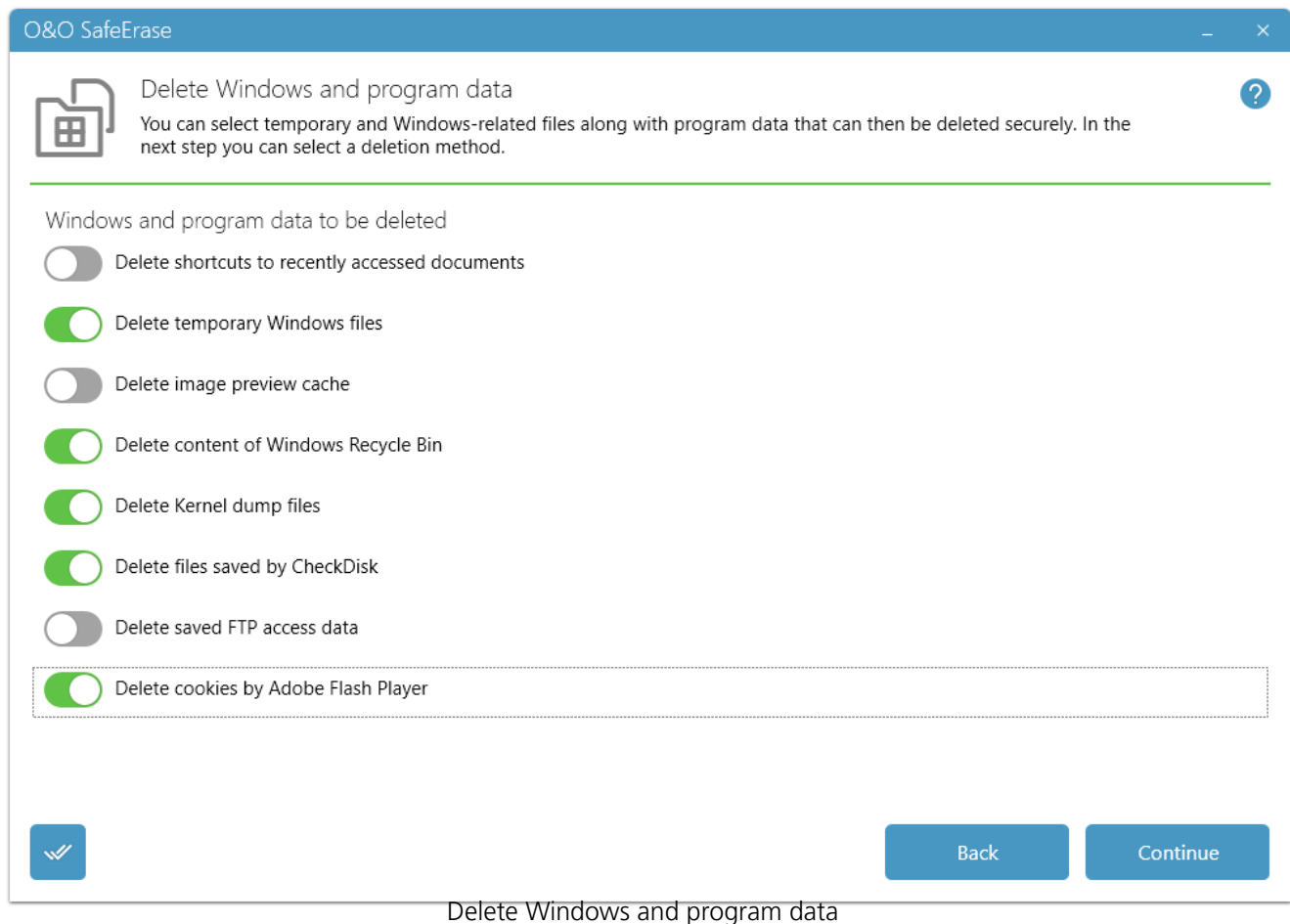
If you also wish to delete form data, bookmarks, and passwords, switch to "Browser data" on the start page and select the data you want included.



Delete browser data

Windows and program data

The scan analyzes all Windows and program data also found in the similarly named feature on the start page and marks this data for deletion.



Free Space

Files that were not deleted securely will be displayed if you have administrator permissions for the computer being scanned. These files are located in the computer's free space and can be recovered, despite already having been deleted by either you or the system itself. If you run a deletion after the scan (by clicking "Continue" and "Delete now"), the free space will be cleaned and all these data remnants permanently removed.

Note:

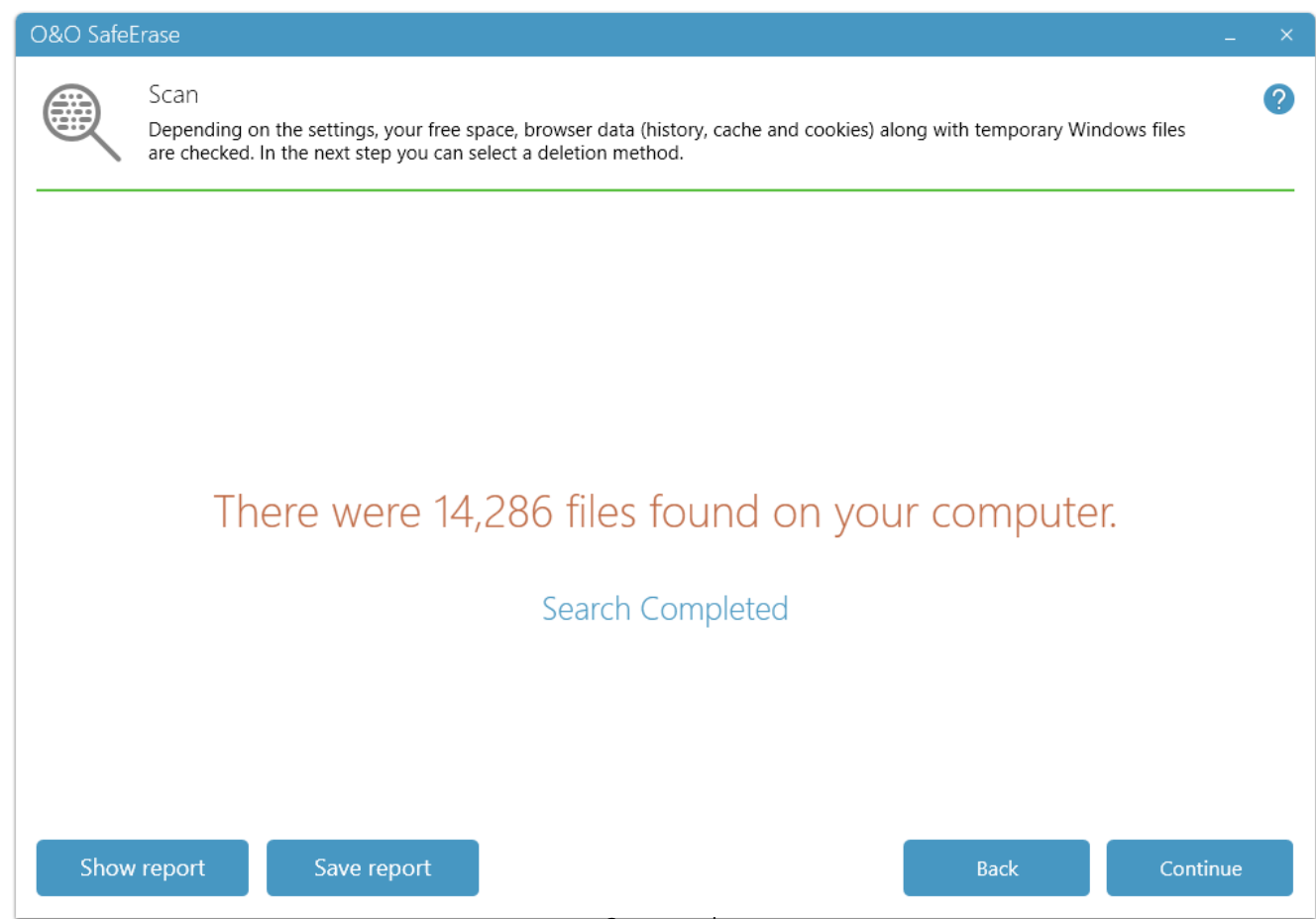
The scan itself does not delete any data. It gathers information about existing data and marks it for deletion. If you return to the start page, all the data found remains unchanged.

Warning:

After running deletion of the data suggested by the scan, your free space is clean. Files that were inadvertently deleted cannot be restored.

Further steps

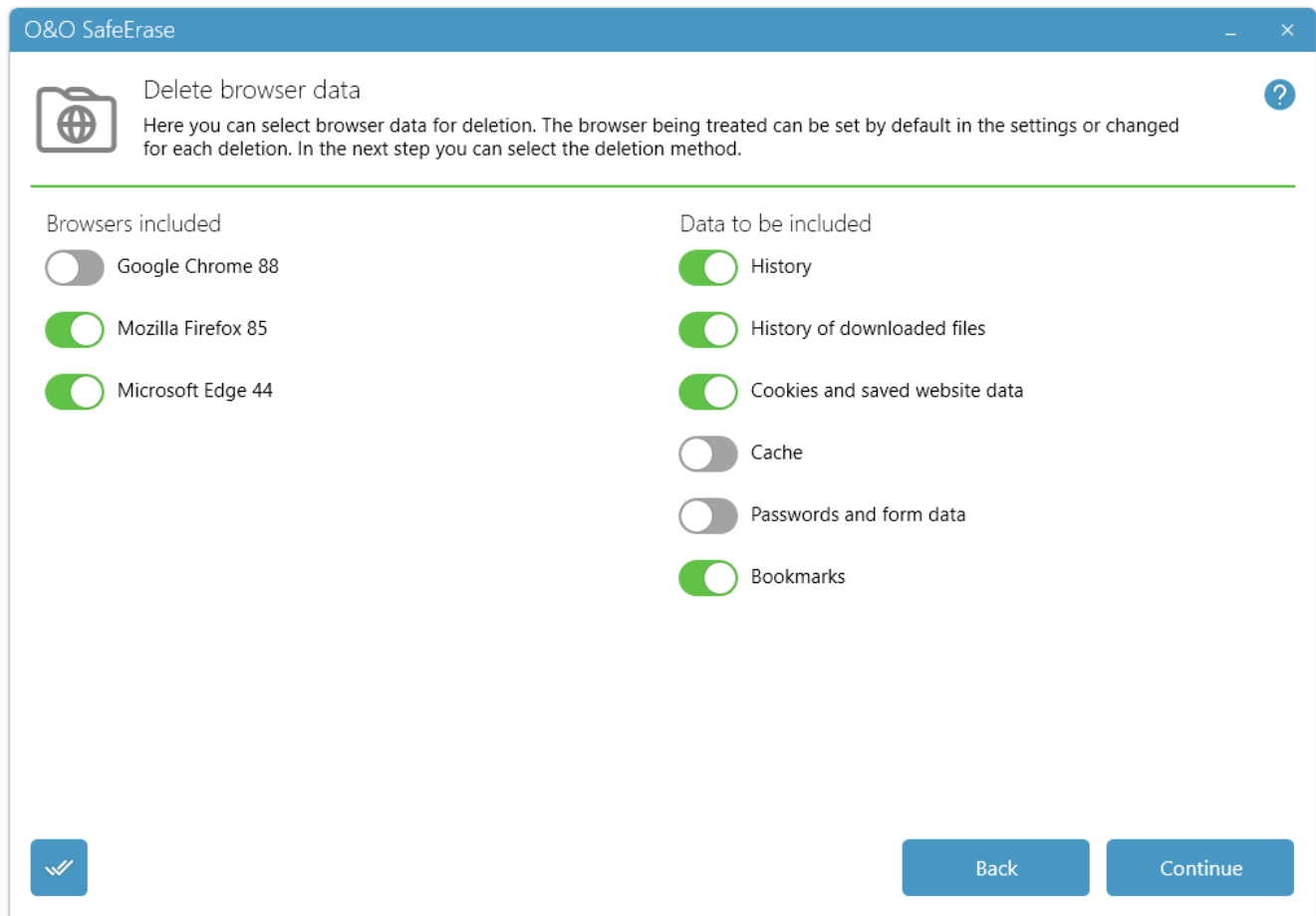
Once the scan is completed, you can have the list of detected files displayed by clicking "Show report" or click "Continue" to select a deletion method. You can also select "Return" and go back to the start page with your data remaining unchanged.



Scan result

Securely delete temporary Internet files

Temporary Internet files are automatically created by your browser, whenever you use it. It is therefore retroactively traceable, which Internet pages have been visited by you. Sometimes, even login data is saved on your computer.



Data to be deleted

Delete history

Permanently deletes the list of URLs that you visited.

Delete history of download files

Deletes the temporary files that were saved in the browser list during downloads.

Delete cookies and saved website data

Permanently deletes files that were stored on the computer by websites.

Delete cache

Permanently deletes copies of web pages, pictures and media files that were saved to allow faster

access.

Delete passwords and form data

Permanently deletes information that you have entered in forms.

Delete bookmarks

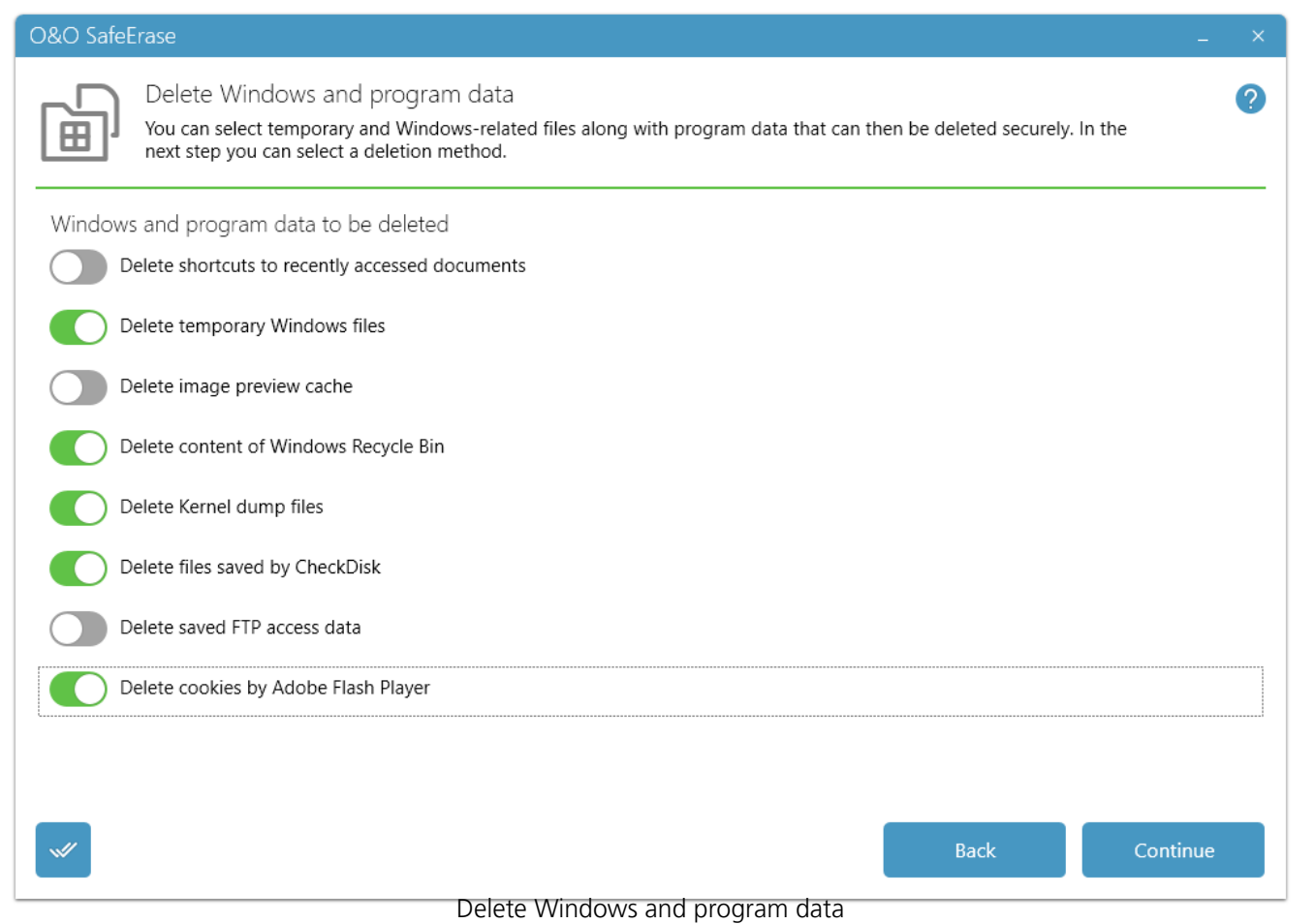
Permanently deletes your list of favored Websites.

Once you've made your selection, click **Continue** and then select a deletion method . If you don't want to delete anything, click **Return** and your data remains unchanged.

Securely delete temporary Windows and program files

By clicking **Windows and program data** on the start page, you reach the place where you can select the Windows and program data for deletion.

The operating system often buffers files temporary to unburden the memory. Normally, these temporary files are automatically deleted after having been used. Yet, even those deleted temporary files can be restored. Even if you securely delete individual files, some of that information still exists as a temporary file - a restoration cannot be excluded. To make sure that these temporary files do not cause any damage we recommend removing them with O&O SafeErase.



Selection of the Windows files

Shortcut to last accessed files

Temporary Windows files

Explanation

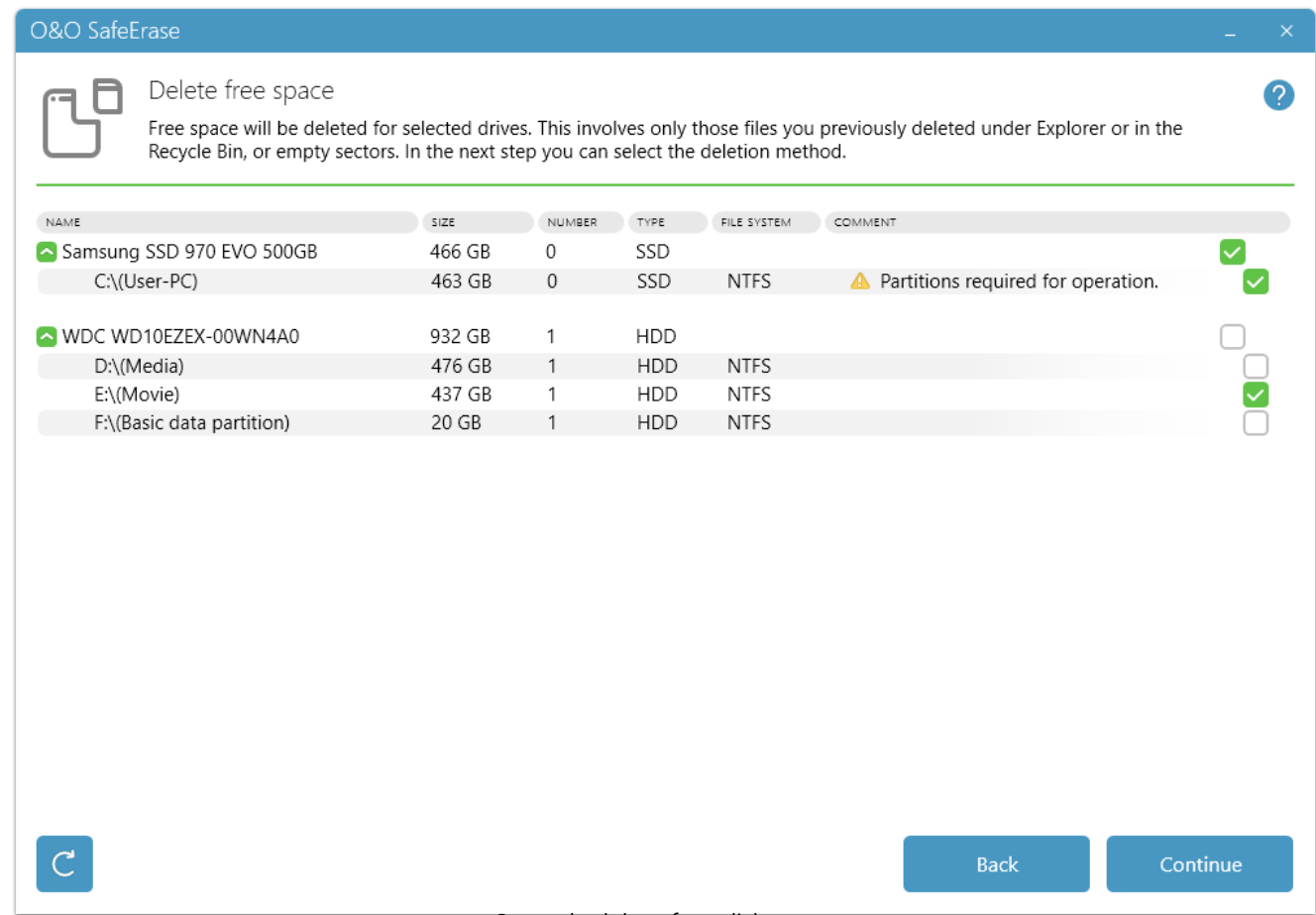
Permanently deletes the displayed shortcuts to files, which were just opened, e.g. the shortcuts displayed in the Windows start menu
Windows sometimes stores temporary information in the folder TEMP. Normally, temporary information is deleted when

	Windows shuts down. You can permanently delete temporary files, which have not been modified for a week, without hesitation.
Image preview cache	Permanently deletes thumbnails - the preview of pictures from the cache. The cache enables the quicker preview of pictures, using the miniature view for example.
Content of the Windows Recycle Bin Kernel memory dumps	Removes files from the Windows Recycle Bin. Permanently deletes the copy of the storage content, which is saved in Windows in a file with the filename extension DMP, whenever Windows creates a storage statement for critical errors.
Stored data from CheckDisk	Permanently deletes files stored by CheckDisk due to system errors.
Stored FTP access data from Explorers	Removes the access data from FTP-Server stored in the Registry. (Path and password)
Adobe Flash Player Cookies	Permanently deletes the Cookie files from Adobe Flash Player.

Securely delete free disk space

Select **Free Space** on the start page if you want to clean your free space.

You have generally already deleted data before installing O&O SafeErase. In order to be safe, and make sure that this data will never be reconstructed, O&O SafeErase includes a feature that wipes your free space clean. This enables you to securely delete data even after a regular deletion.



Securely delete free disk space

For Server and Workstation Editions only:

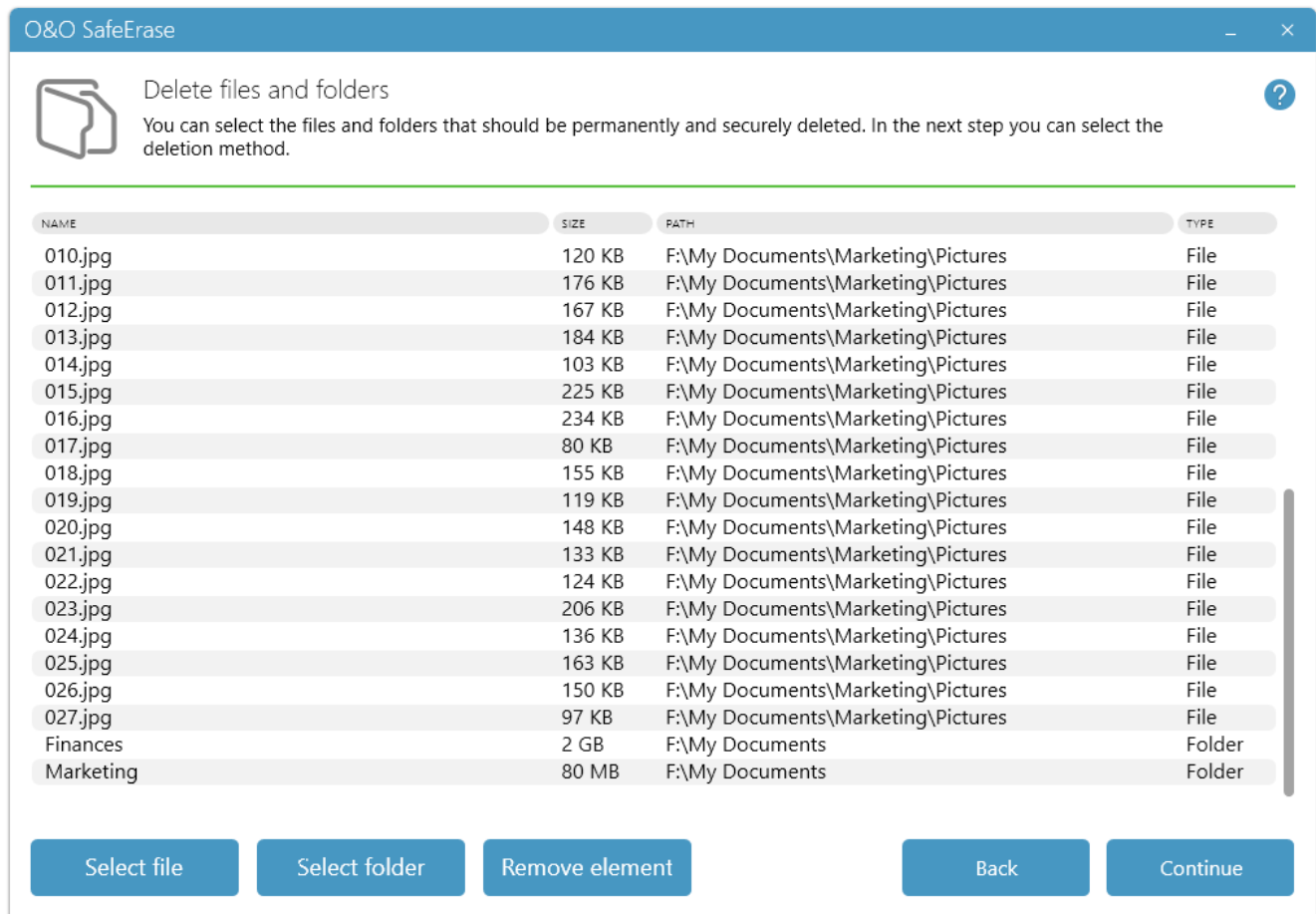
A special feature of the Workstation and Server Editions is their ability to simultaneously delete free space from multiple physical disks. This is different from the Professional Edition where deletion is performed successively. If, for example, your computer has an internal hard disk and a USB disk connected, O&O SafeErase Workstation and Server Editions will be able to delete both disks simultaneously. This will let you save a considerable amount of time when working with large data volumes.

Please note:

Delete free space only on those drives where you won't need to restore any data. Any inadvertently deleted data will also be permanently removed and cannot be restored.

Securely delete files and folders

Select Files and folders on the start page to permanently delete selected data. Once deleted, this data cannot be restored – not even with the help of specialized data recovery software.



Securely delete files and folders

Select files and folders

You can select one or more files and folders by adding them to the list by drag and drop. To do this, open your file explorer, mark the selected files, and then move them with the mouse into the gray zone of **Delete files and folders** in O&O SafeErase. These items will then be marked for deletion.

You can also click the button **Select file**. It opens a dialog where you can select one or more files. By clicking **Open**, these files will be added to the list. If you want to add a folder, click **Select folder**. A dialog will then open where you can select one or more folders that can be added to the list.

To remove items from the list so that they will no longer be marked for deletion, mark one or more items in the list and either push the delete key or use the **Remove item** button to delete them from the list. The items removed from the list will not be deleted by O&O SafeErase.

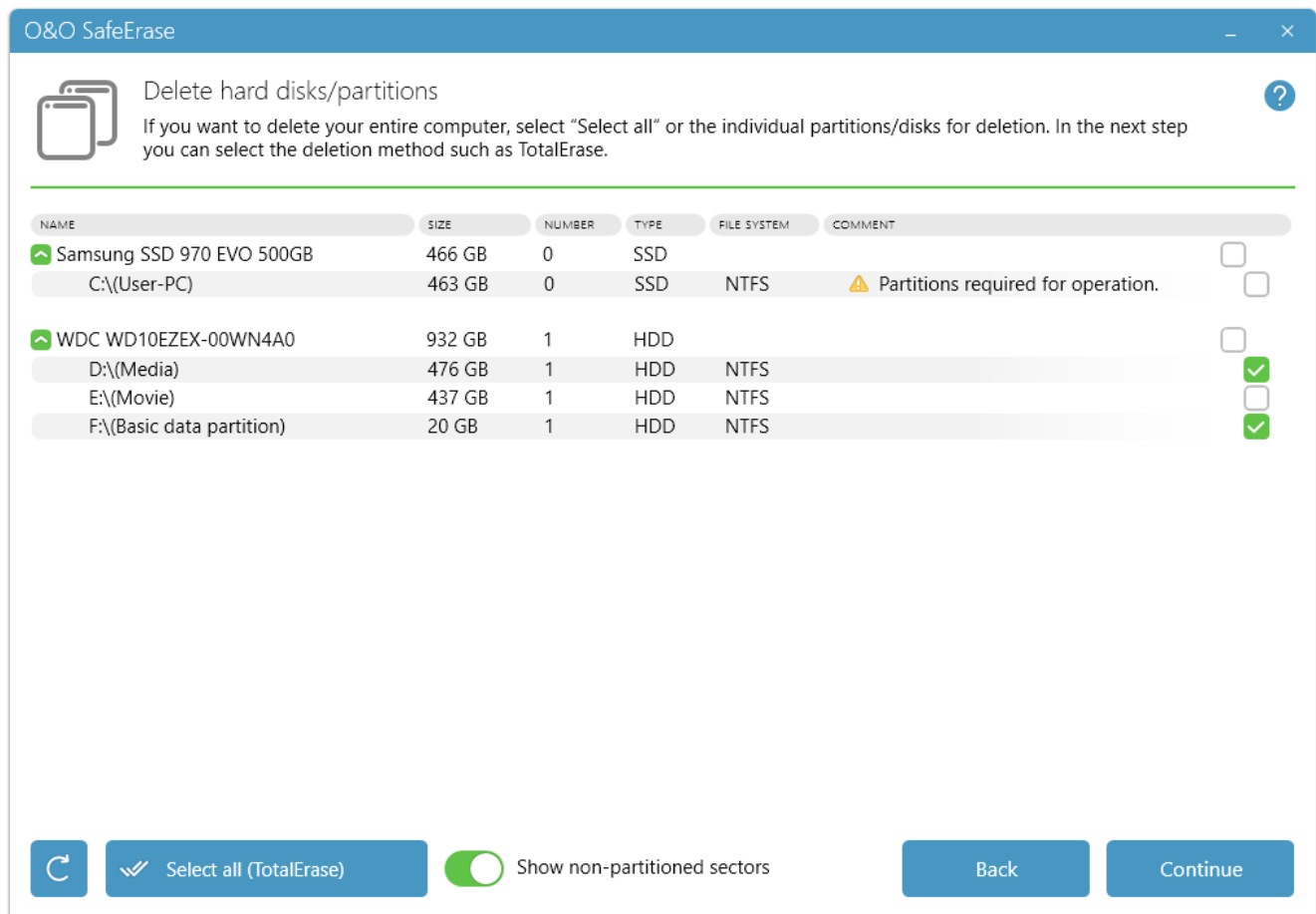
Please note:

Once deletion of folders is successfully completed, their content is permanently deleted and cannot be restored. Please make sure that the folders selected for deletion contain no files that you may need.

After clicking **Continue** you can select a deletion method. By clicking **Return** your selection will be canceled.

Securely delete hard disks and partitions

To securely delete entire disks or partitions, select **Disks/Partitions** on the start page.



Securely delete hard disks and partitions

In the list that's shown you'll be able to select the partitions you want deleted. You can also select the disk itself if you want to delete all partitions along with the non-partitioned sectors. You have the option of either showing or hiding the non-partitioned sectors. When selecting a system drive, a security prompt will appear when you click **Continue**. If you didn't select a system drive or have answered the security prompt successfully, clicking **Continue** will bring you to the selection of a deletion method. By clicking **Return** your selection will be canceled and your data remains unchanged.

To delete the entire computer securely, click **Select all (TotalErase)**.

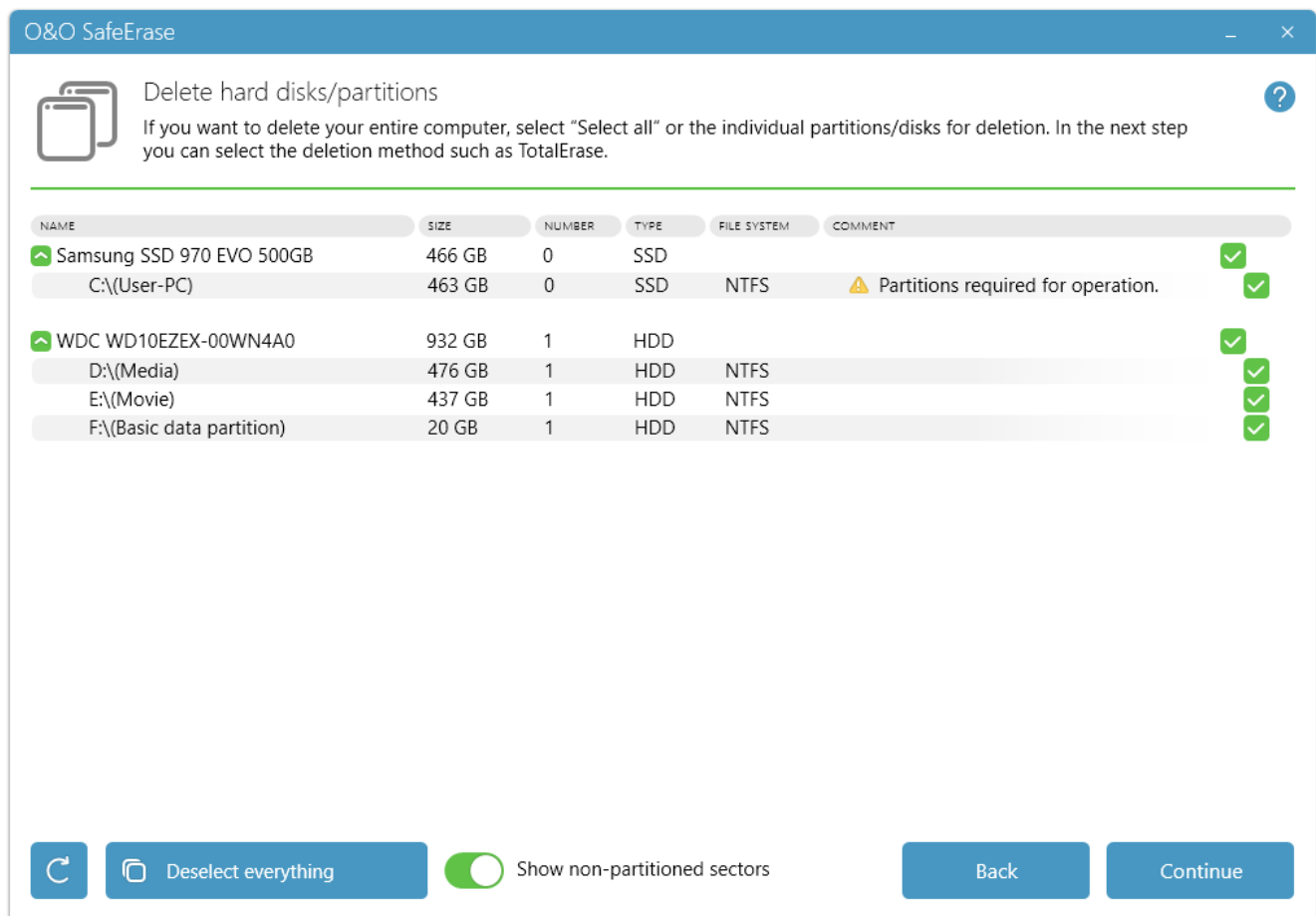
Only in the Workstation and Server Editions:

A special feature of the Workstation and Server Editions is their ability to simultaneously delete partitions on dissimilar physical disks or entire hard disks. This is different than in the Professional Edition where deletion is performed successively. If, for example, you have an internal hard disk and a USB Stick connected, O&O SafeErase Workstation and Server Editions can delete both disks at the

same time. This can save you a considerable amount of time when working with large data volumes.

Securely delete the entire computer

To securely delete the entire computer go to „Disks/partitons“ and below the list of drives select **Select all (TotalErase)**.



Securely delete the entire computer

Important!

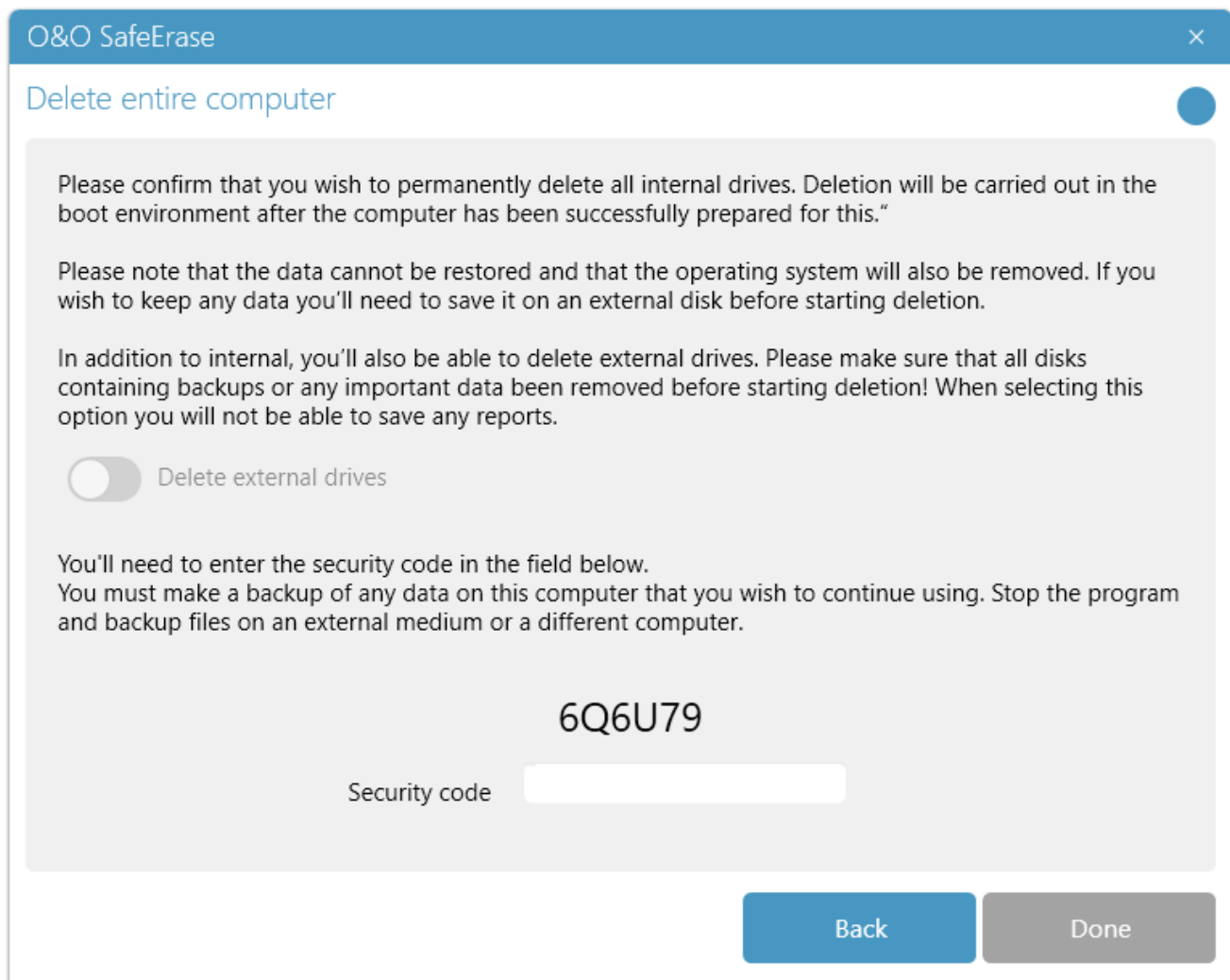
Please bear in mind that data deleted with O&O SafeErase **cannot** be restored, not even with the use of special software or hardware. Please bear this in mind to avoid accidental deletion of you data!

Permanently deleting your entire computer enables you to securely delete your data when you sell, give away, or throw away your computer. You can rest assured that nobody will be able to restore and abuse your data.

All drives will now be selected except for USB devices, CD/DVD drives and any other storage devices that are not built-in. Click **Continue** to configure TotalErase. You can now select all external disks to also be securely deleted. Please keep in mind that if do this it will not be possible to save any reports or log files. If you don't include external drives in deletion, reports and logs will be saved on

the first available external drive.

You should then answer the security prompt and click **Ready** to see the choice of deletion methods. Close the dialog or click **Return** to see the list of drives again.



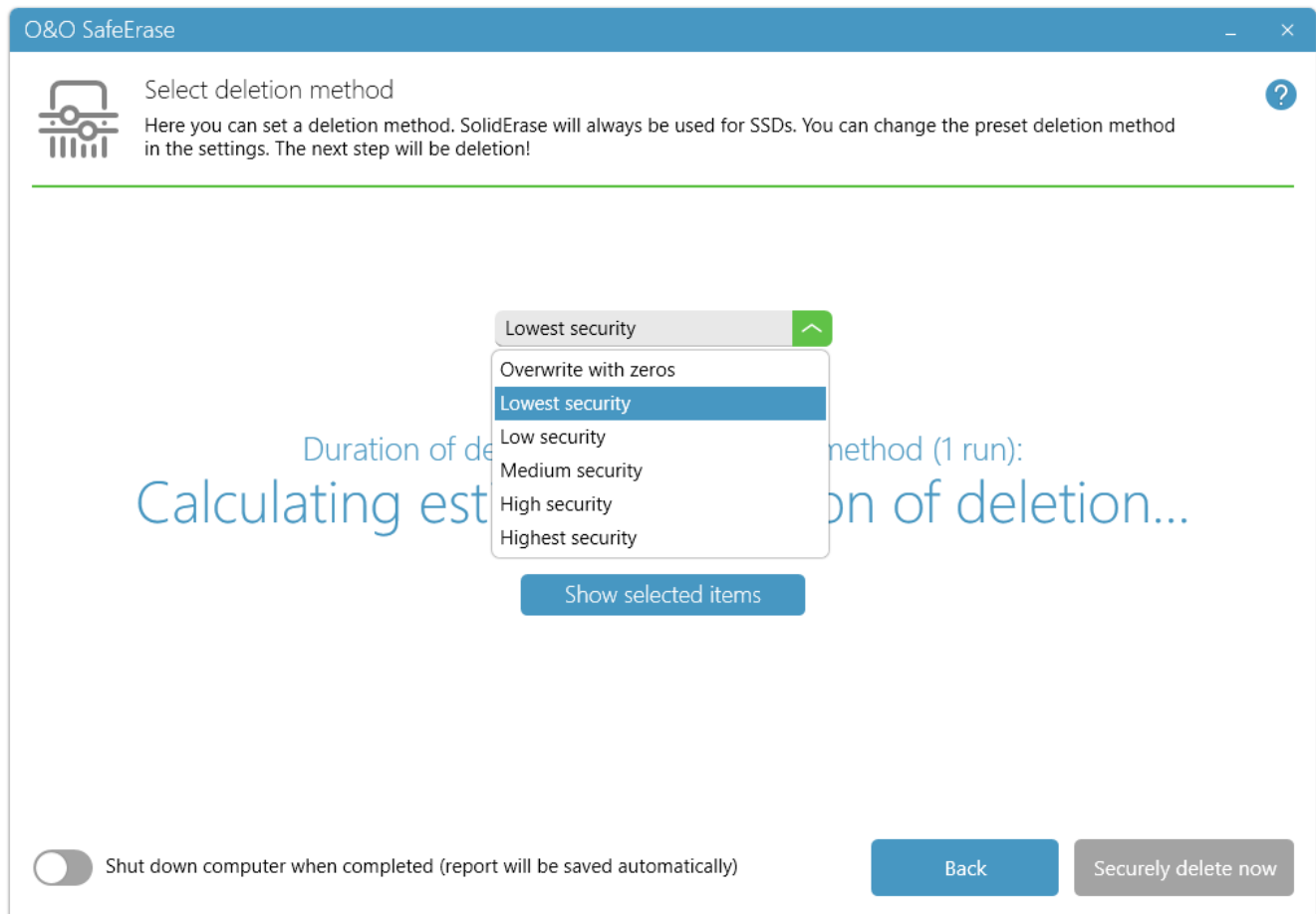
Enter code

Important!

The function **Securely delete entire computer** erases all data from your computer without additional boot disk type media. Once you have confirmed the execution of this function, all data on your computer will be deleted, after which all data and settings will be lost.

Method of deletion

There are six methods of deletion to securely delete files. Each method offers another security level. The deletion varies in time due to the security level of the method used. The method "Lowest security" is preset.



Method of deletion

Even data securely deleted with the lowest security level cannot be restored using commercial data rescue programs. These methods are useful if you want to delete private pictures or videos before selling your computer. Data Ssecurely deleted with medium or high security levels cannot be restored even by data rescue labs or from specialized offices. Use this method when deleting sensitive company or financial data for instance.

Please note:

Higher levels require a longer amount of deletion time as the lower levels. The higher the level is, the higher number of deletion cycles have to be completed. You can now set the PC to run the deletion process and then shut down automatically.

Please note:

The display of time remaining is only an approximation. The actual amount of time needed for

deletion can vary significantly, depending on the system's capacity and condition of the hardware. This indicator basically serves to illustrate the differences in time needed for deletion according to the volume of data and the deletion method selected.

Six methods of deletion

Highest Security (35 runs)

The method that offers the highest level of security is based on a process developed by Peter Gutmann and presented in his article "Secure Deletion of Data from Magnetic and Solid-State Memory". In this method, deleted data is overwritten by a series of 35 different deletion cycles that are executed in a random order.

High Security (7 runs)

The method for high security is based on the January 1995 'National Industrial Security Program Operating Manual' by the DoD. In this seven cycle variation (DoD 5220.22-M ECE), data is first overwritten three times with DoD 5220.22-M (E) Standards, then with a specific random value, and finally once again with DoD 5220.22-M (E).

Medium security (6 runs)

This method for medium security conforms to the standards of the German BSI as described in the "BSI IT Baseline Protection Manual". Data is overwritten with a random value and then with this values complement. This procedure is completed with new random values three times.

Low Security (3 Cycles)

The method is based on the "National Industrial Security Program Operating Manual", NISPOM (US DoD 5220.22-M) the DoD from January 1995. It proceeds with 3 runs (DoD 5220.22-M E): data is first overwritten with a fixed value, then with the complement of that value, and finally with a random value. The advantage lies in the speed with which this method proceeds to securely delete data.

Lowest Security (1 run)

This method is quick, but offers very little security in the deletion of data. Using this method, data is overwritten with random values in one cycle.

Overwrite data with zeros

This method is the fastest, but offers very little security in the permanent deletion of data. The selected files will be overwritten with zeros.

Securely delete data from solid state drives (SSDs)

O&O SafeErase includes the feature SolidErase, which was developed especially for the deletion of SSDs. SolidErase uses resources sparingly and thoroughly so that the data is not recoverable and the SSD is exposed to the least possible strain.

Deletion process

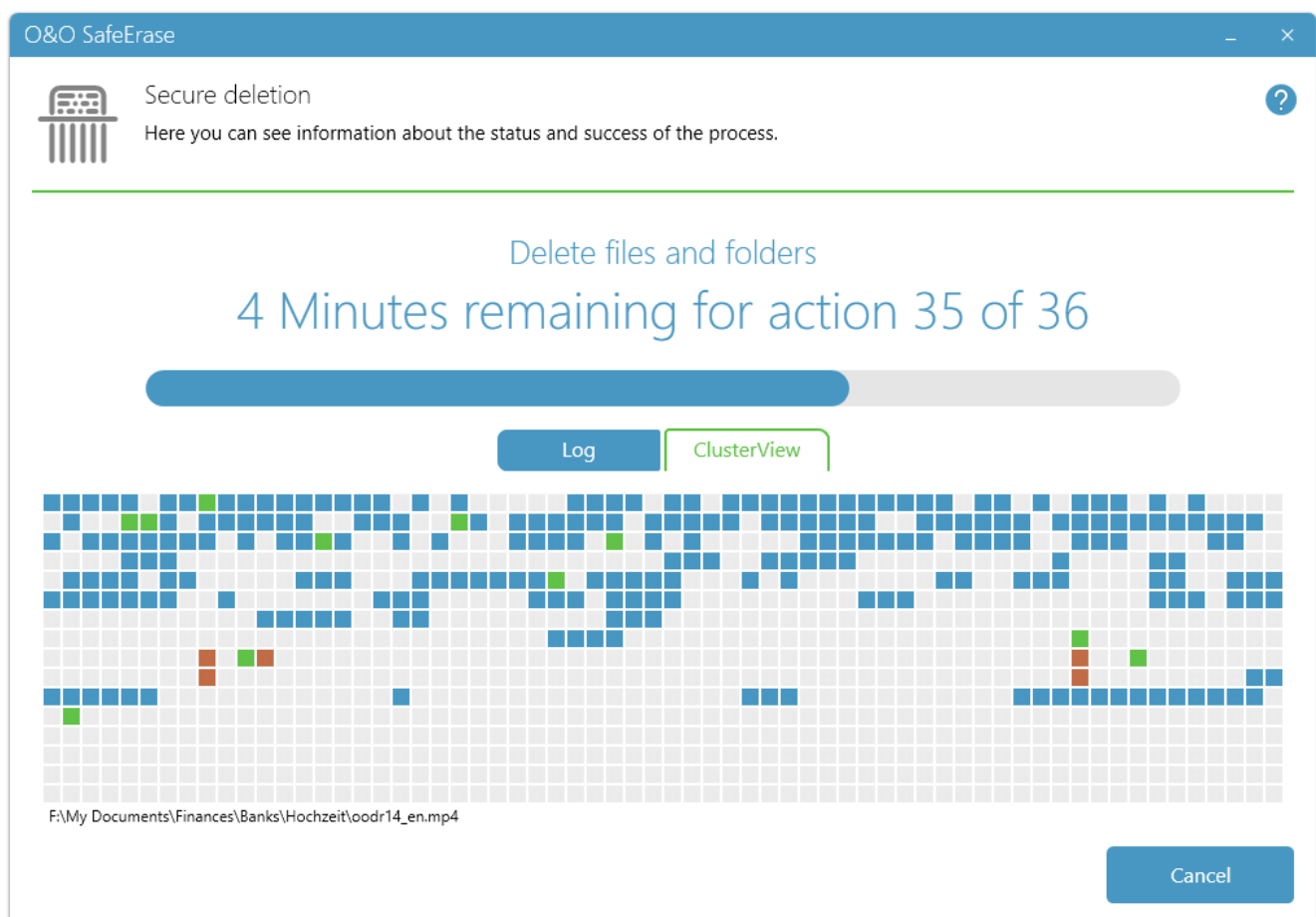
ClusterView

The ClusterView shows where the data being deleted is located and charts the approximate progress of deletion. O&O SafeErase automatically displays the files or partitions being deleted along with the full stand of the partitions. The view can change depending on the items currently being deleted.

It's not always possible to display the position and progress of very small files such as browser data because these files were either saved in the clipboard or were deleted by O&O SafeErase before the ClusterView was able to locate them. During deletion of free space, the progress of deletion on the partition will be displayed in its entirety, the subtask itself will not be visible in the ClusterView. You should also note that O&O SafeErase deletes simultaneously whenever possible, especially in the Server Edition. This can result in the ClusterView displaying parts of the deletion process only briefly.

Note:

Partial display in the ClusterView does not reflect partial completion of the deletion! The deletion itself is done by a different part of the program and is totally separate from the ClusterView. The ClusterView serves merely as a visualization of the deletion process.



ClusterView

Why could my deletion only be closed with a warning?

You may occasionally receive notification that deletion could only be completed with warnings. This means that some, but not all, elements marked for deletion were not able to be deleted.

There are various reasons why this happens. When deleting Windows and program files, some of these files may be needed by Windows itself. This is usually indicated in reports as "blocked by [...]". If this is caused by a program you opened, you can close it and then try deleting again. If it involves a system program, restarting the system can sometimes help. Most often, however, it's just not possible to delete the data because the system will not unblock it.

The notice "Access denied" in logs and reports involves files that may only be changed by the system. These are usually located in a folder that O&O SafeErase identifies as containing temporary files but not all of these files are accessible.

Note:

EFS encrypted files are not supported and will therefore not be taken into account for deletion.

The same thing can occur when deleting Browser data. This is especially the case after deleting data from Edge or Internet Explorer where a notice frequently appears indicating that deletion was closed with warnings. Edge or Internet Explorer are started by Windows for internal processing in the background and some of their files are actively being used accordingly. If warnings are displayed while deleting browser data, check to make sure all browsers are closed and try again. Sometimes restarting the system is able to help.

If you selected Files, folders, or partitions for deletion and receive warnings, check to see if any files are being used, for example if Explorer is opened in one of them or if a file on a partition is being processed.

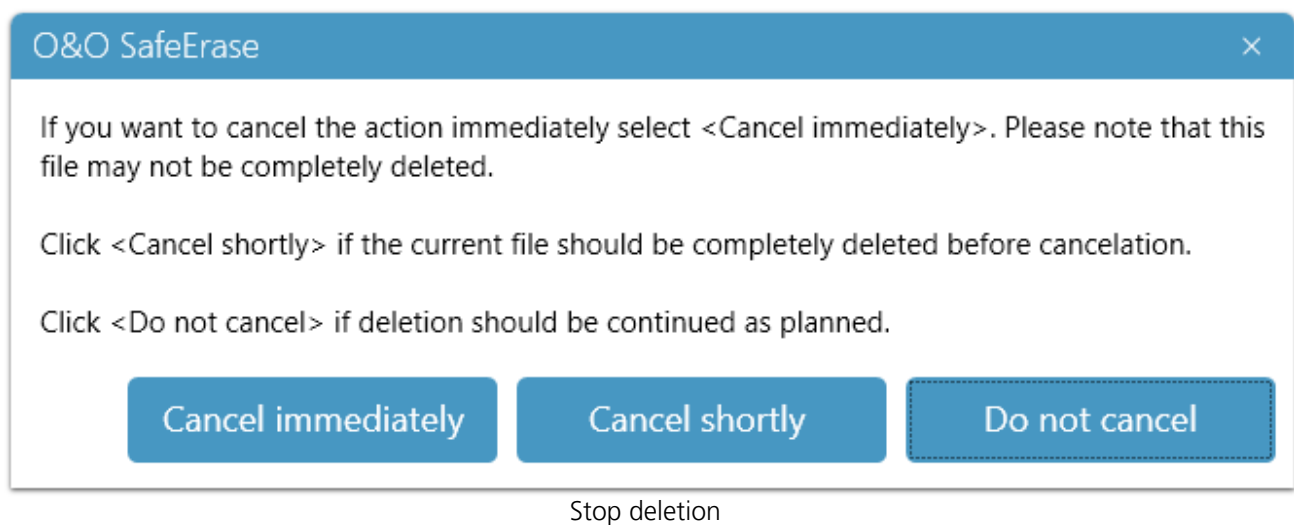
Why does deletion take so long?

Deletion can sometimes take many hours or even days to complete. This is always the case when

- Large volumes of were selected for deletion
- A deletion method with many runs was selected
- The data is located on damaged hardware
- The system is being used to capacity (during a backup or other write processes, Windows updates, etc.)

What happens if I stop deletion?

If you stop deletion you can choose among the following options



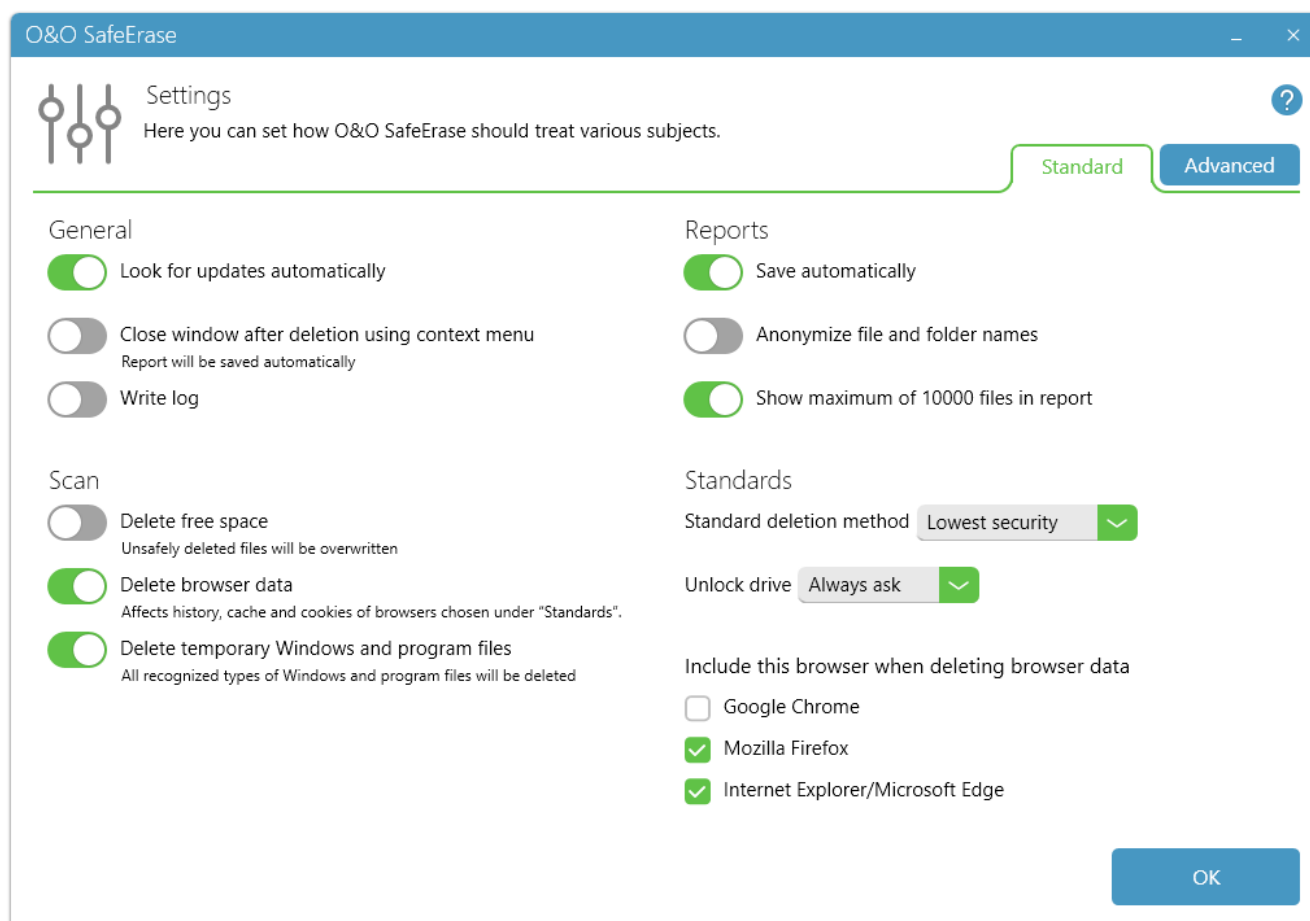
If you click on **Cancel**, the program will ask, if you want to cancel immediately.
If you say **Yes**, the actual process will be stopped with some files still in restorable condition.
Should you say **No**, however, the last file will be completely removed and then the process will be aborted.
Clicking **Cancel** will resume the deletion process.

If, for example, you stop deletion while deleting a partition, you can expect some data to still be readable on the disk while other data cannot be recovered. It's very probable that you'll need to reformat the partition without any guarantee that the old data was securely deleted.

With system partitions, you'll no longer be able to boot the system – not even if you stopped deletion immediately after deletion was started. Deletion, whether partial or complete, cannot be undone and as a result, the system is missing important files needed for booting.

Settings

Settings are divided into four sections: **General**, **Reports**, **Scan** and **Standards**.



Settings

Under **General** you'll find settings related to O&O SafeErase's general behavior. **Reports** allows you to configure settings for all reports generated by O&O SafeErase.

For Scan you can set the kinds of data that should be analyzed. For Temporary Windows and program files, all items listed under **Windows and program files** for selection will be scanned.

Free Space will be analyzed on all drives and deleted wherever necessary.

Deletion of browser data will involve only those browsers selected under **Standards** and includes only history, cache, and cookies. Form data, passwords, and bookmarks remain unchanged.

Settings enabled in **Standards** involve options for which you can select a default response or one that should be frequently applied. You can, for example, select a deletion method with medium security that can be used for every deletion and only changed when needed. You can also indicate how a blocked drive should generally be treated. Changing the default browsers affects the scan

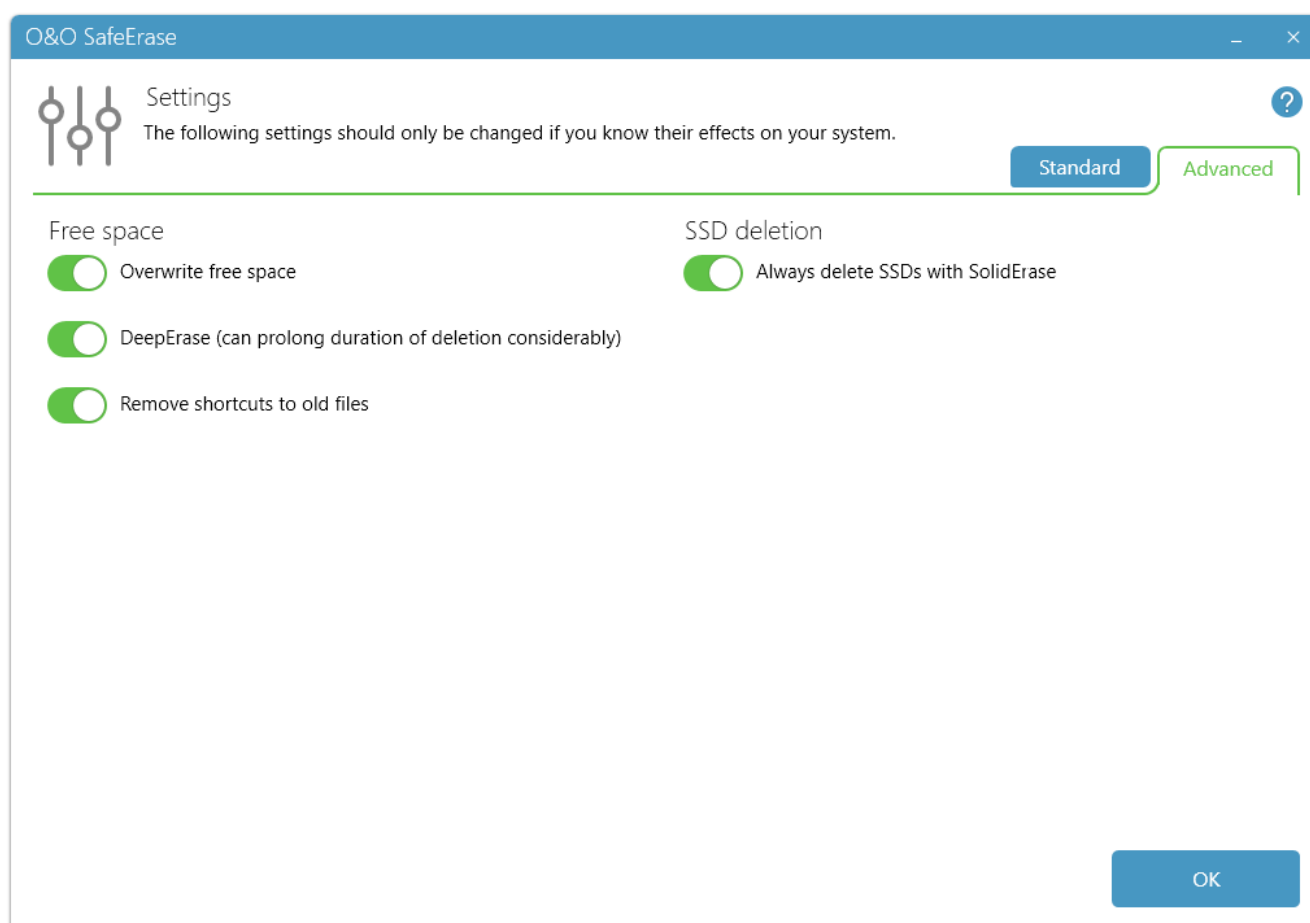
and is preset for deletion of browser data, only to be changed when needed.

Advanced

You have the option of switching to the “Advanced” tab at the upper right. That’s where you’ll find options for deleting free space and SSDs. We recommend enabling these settings only when you are fully aware of their effects and consequences.

Deleting free space consists of multiple jobs and you can select or deselect the individual jobs you’d like to apply. Please note that individual jobs should not be deselected if you’re deleting free space in order to permanently remove data and increase security.

In addition, it’s possible to turn off the special SolidErase method for deleting SSDs and instead, delete them using a different deletion method. SolidErase was, however, developed especially to protect and extend the lifespan of SSDs. This is why using SolidErase on SSDs is recommended.



Advanced settings

Overwrite free space

Deleting a file normally means that it is no longer visible and that the space it occupies is marked as free. At some point this space will be used again and the file overwritten. This tells us that as long as the file is not overwritten, it can be restored. O&O SafeErase solves this problem by overwriting all space the system marks as free.

Remove links to old files

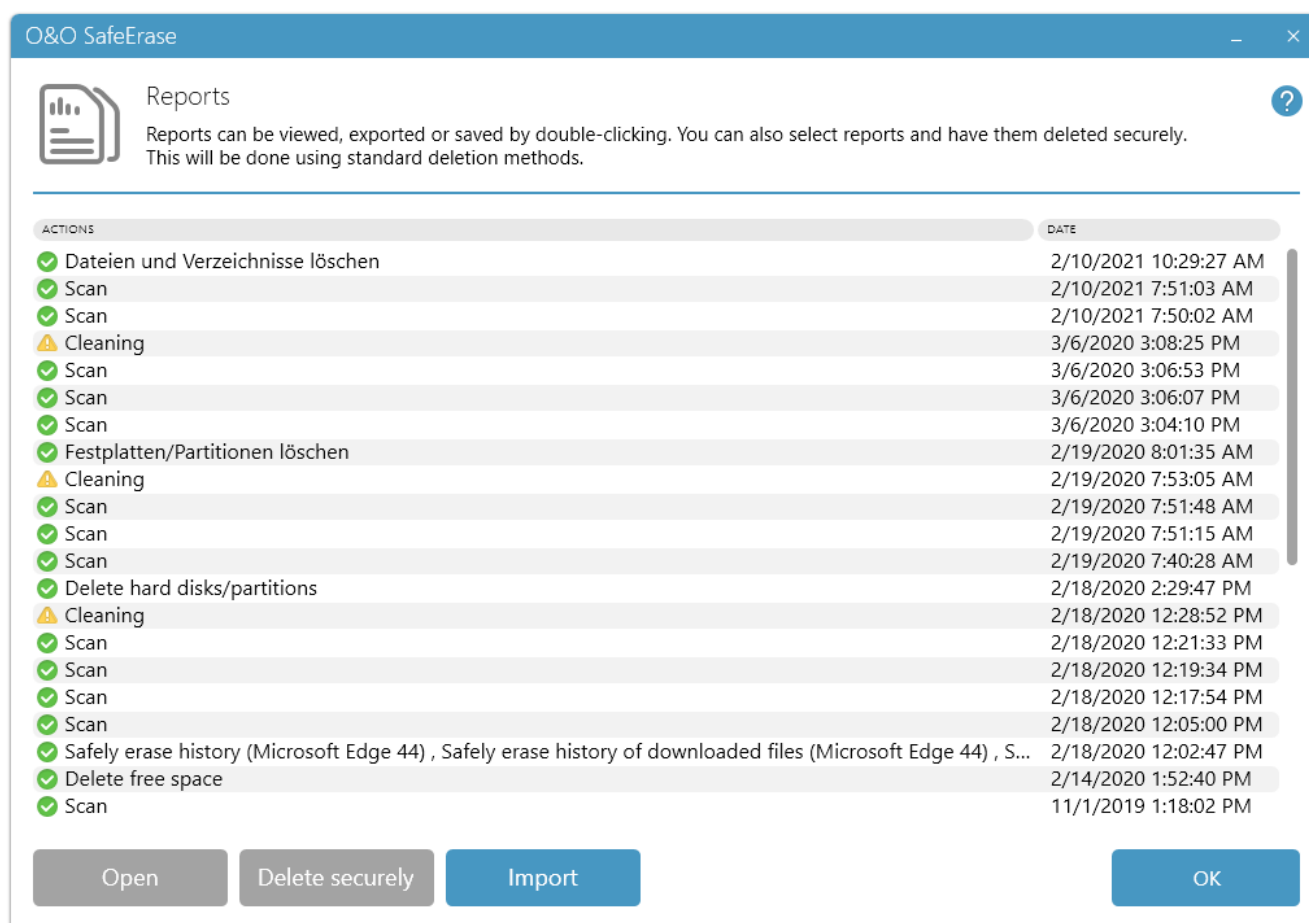
NTFS formatted file systems have a Master File Table, called MFT, which saves information about your files (FAT entries do the same thing for FAT file systems). Using entries in the MFT, it's possible to find those sectors where files are or were located. Data recovery programs use these links to restore data. What's good for data recovery programs is bad for your security; that's why O&O SafeErase deletes obsolete entries in the MFT (or FAT).

DeepErase

In a worst case scenario, remnants of previously deleted data might still be found in the smallest disk units (called clusters). To insure maximum security, these smallest units also need to be cleaned out. So-called cluster tips can accumulate while a computer is in operation and this can result in the initial DeepErase requiring more time for completion. After the second time, however, the duration will be reduced considerably. By running DeepErase at regular intervals, only a fraction of even this time will be needed.

Reports

Deletion reports can be found under **Reports** and you can save them manually or automatically (via Settings) after every deletion. You can open a report by double-clicking. If you wish to open one or more reports, you can mark the ones you want with a mouse click and use the button **Open report(s)** at the bottom left. The button **Delete report(s) securely** will delete all the marked reports. This can also be done by pushing the **Delete** key. If you wish to delete all reports you can use the shortcut **Ctrl + A** and then push **Delete** or the **Delete report(s) securely** button.



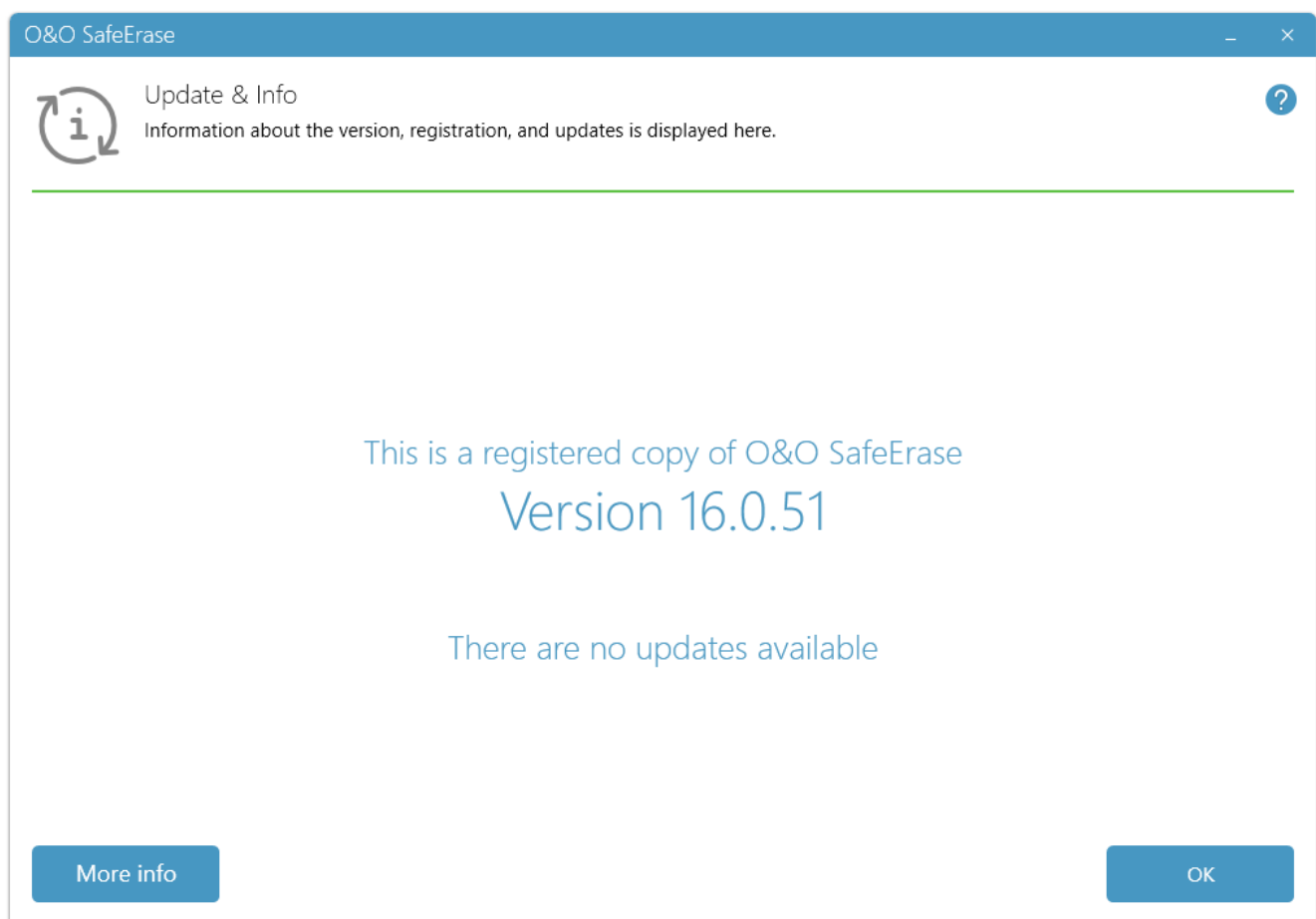
Reports

You can save an opened report as a chart. This can then be read using standard programs from Microsoft, OpenOffice, or similar providers. It's also possible to print reports. You should, however, keep in mind that reports can sometimes be very long and in a printed version take up many pages.

Update & Info

Under **Update & Info** you'll find information about the program version, the licensing status, and updates. If you need to see your license data click **More information**. If you haven't yet entered a license, click **Register now** and you'll be able to do so.

In the lower section you'll find information about available updates and have the option of installing them. You'll also be informed if an upgrade is available. Based on the license used for registration, using the upgrade beyond the 30 day trial period might require an additional payment.



Note

So-called "Minor Updates" (Version 15.0 to 15.1, 15.5, etc.), where smaller changes in the program have been made, are free. "Major-Updates", such as from version 15 to 16, must generally be purchased.

- If you decide to upgrade, download the current program version from our website under ([Downloads](#)) and save the installation file on your computer.

- Your license data will normally be saved during Minor Updates so you won't have to enter them again after a successful installation. To be on the safe side, we do recommend keeping your license key for the current version within easy reach - just in case you run into trouble.
- "Major Updates" will require the new license that you receive upon purchasing the software.

Note

You won't be able to use the Update function if you're using O&O SafeErase as a component of a Boot CD, such as O&O BlueCon.

Use O&O SafeErase via right-clicking

O&O SafeErase integrates itself into your Windows Explorer. You can access O&O SafeErase via right-clicking. Select one or more deletion objects and right-click them.

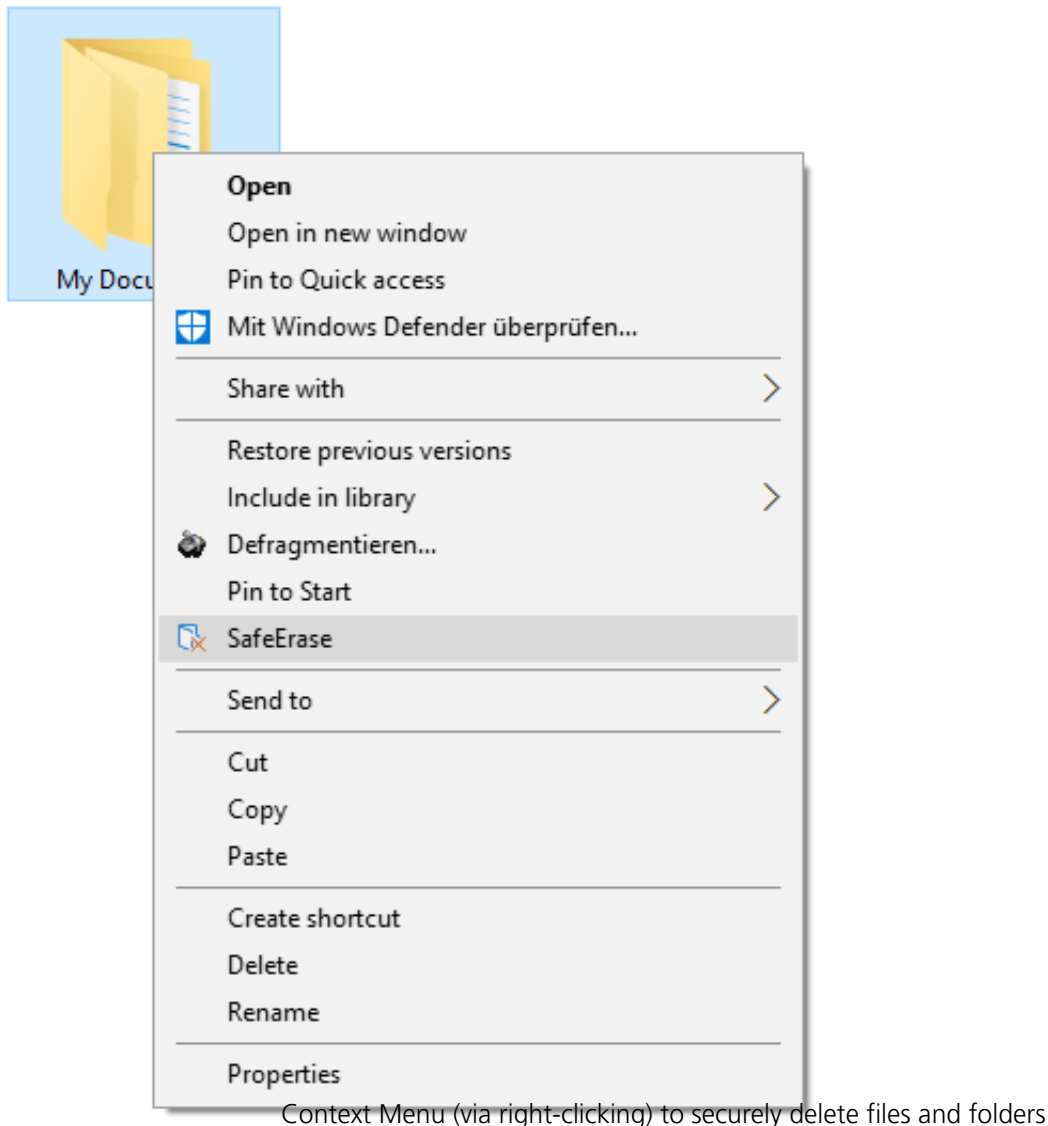
1. The entry **Securely erase** allows you to start O&O SafeErase.
2. After selecting the deletion method you can start the deletion with **Securely delete now**.

Securely delete files and folders via right-clicking

To delete files or folders, right-click on them and select **Securely erase** – exactly like the Windows entry "Delete".

1. O&O SafeErase will then ask you to proceed selecting the deletion method. More about this can be found in the chapter regarding Deletion methods.
2. **Securely delete now** starts the deletion process.

If you would like to delete more than one file, hold down the 'Ctrl' key and highlight the files with the left mouse button.



Context Menu (via right-clicking) to securely delete files and folders

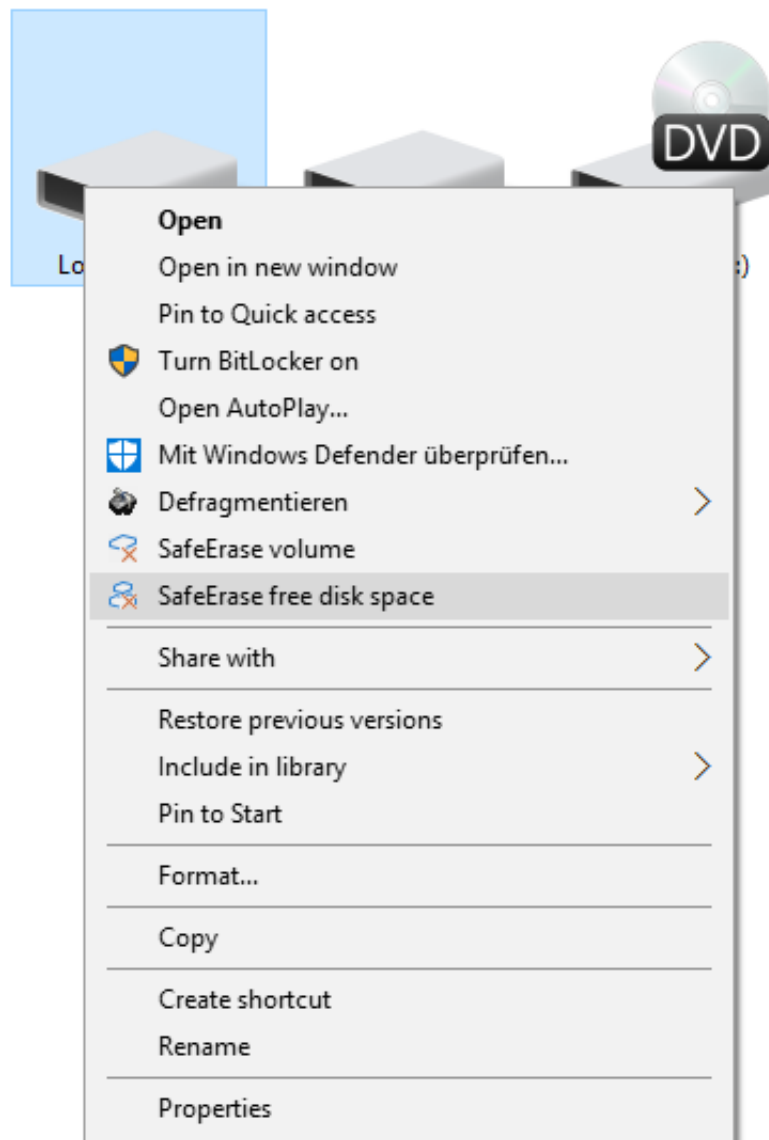
Securely delete a hard disks/partitions via right-clicking

Simply find the partition in Windows Explorer you would like to securely delete and right click on it.

1. Select the menu entry **Securely erase volume**.
2. O&O SafeErase will then ask you to proceed selecting the deletion method. More about this can be found in the chapter regarding Deletion methods.
3. **Securely delete now** starts the deletion process.

Please bear in mind that this process might take up some time depending on the deletion method and the size of the partition.

After the partition has been permanently deleted it is necessary that you reformat the partition in order to use it again. More information about the formatting of a hard disk drive can be found in the Window's Help file.



Securely delete a hard disks/partitions via right-clicking

Securely delete data later by right-clicking

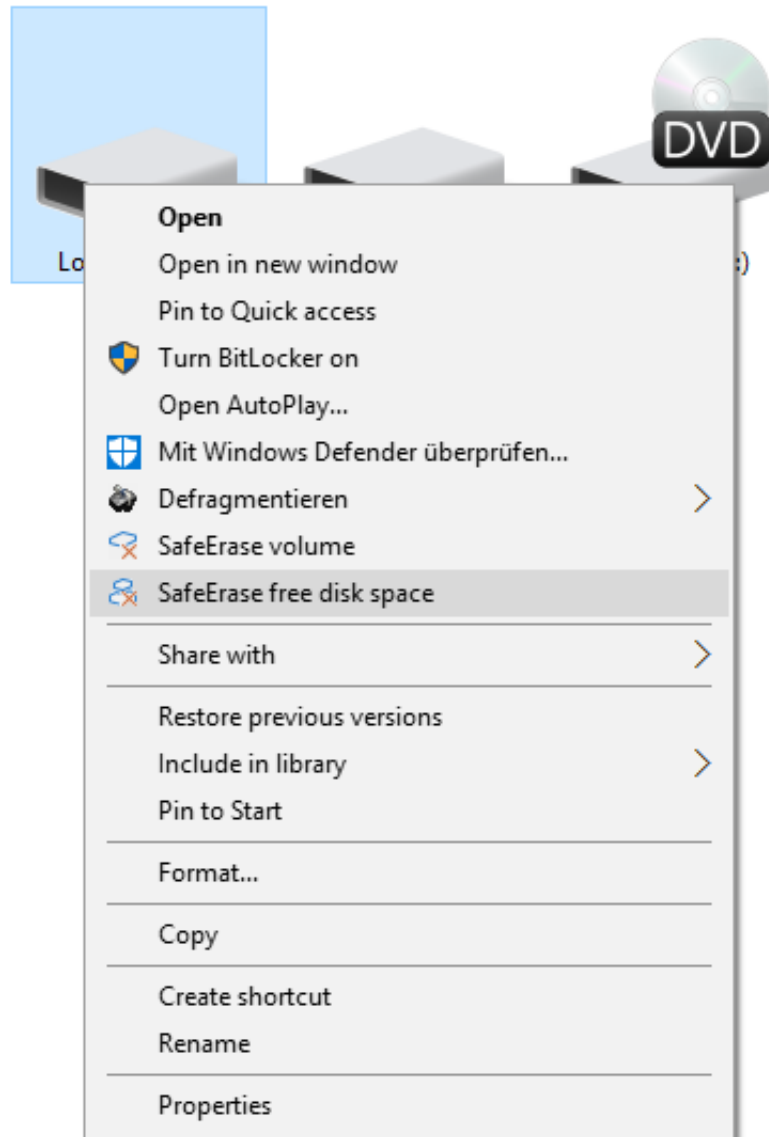
Data deleted with Windows does still exist on your computer. Windows makes these areas available to be rewritten as free space on the hard disks. To make sure that all old deleted data cannot be restored anymore, delete the free space with O&O SafeErase.

1. To do this, select the function **Securely erase free disk space** by right-clicking on the drive where you would like to wipe the free space.
2. O&O SafeErase will then ask you to proceed selecting the deletion method. More about this can be found in the chapter regarding Deletion methods.
3. **Securely delete now** starts the deletion process.

The higher the level of security and the more free space for deletion, the longer the deletion process will take.

Important

No existing files or data will be deleted, rather specific pieces of data that are marked free on the hard disk. After this process has been completed, you will not longer be able to restore this data ever again.



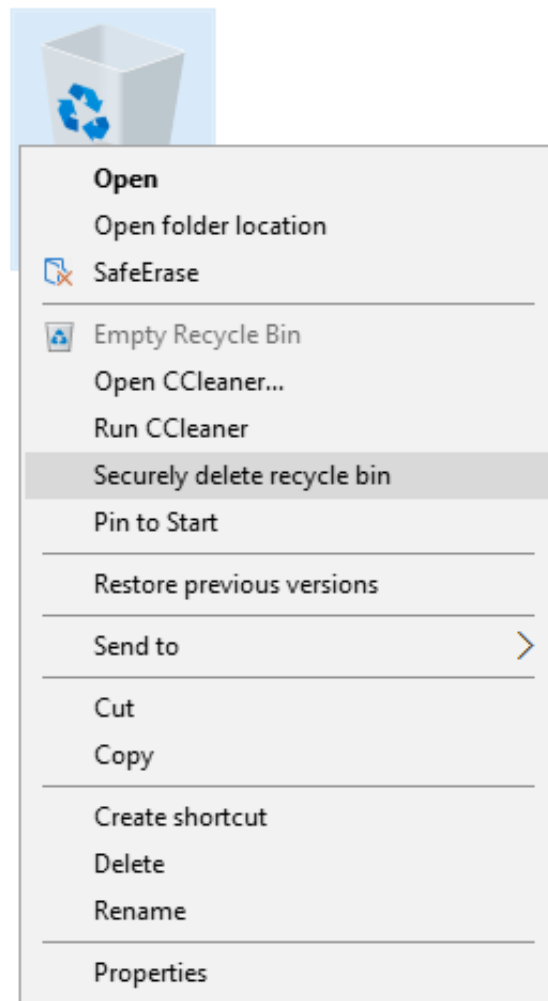
Context Menu (via right-clicking) to Securely delete free space

Securely delete data from the Windows Recycle Bin via right-clicking

Select the Recycle Bin and right-click on it to view the context menu. There you can click on **Securely erase (empty) Recycle Bin**.

1. O&O SafeErase will then ask you to proceed selecting the deletion method. More about this can be found in the chapter regarding Deletion methods.

2. **Securely delete now** starts the deletion process.



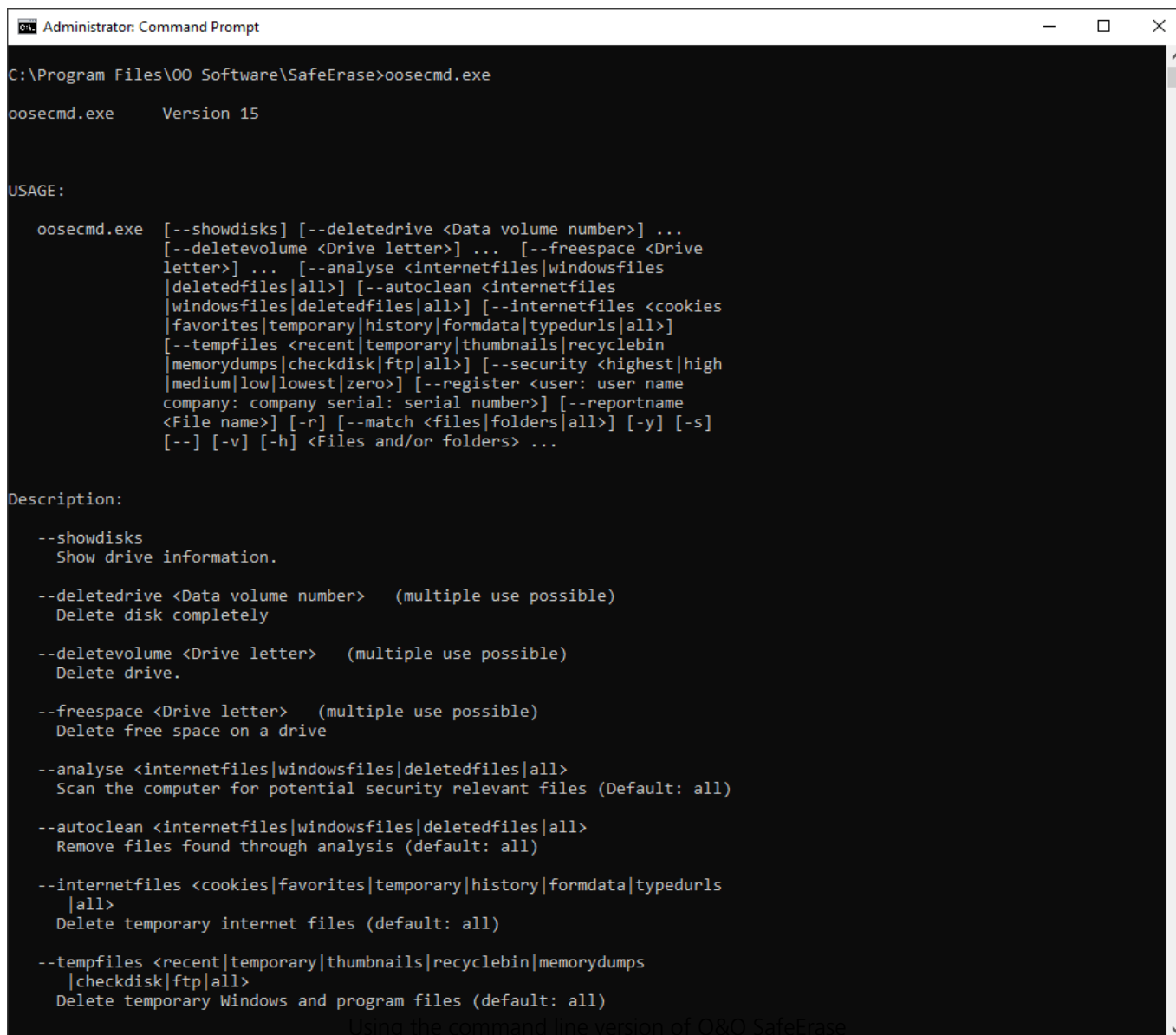
Via right-clicking for Recycling Bin with securely delete Option

Important!

Windows diverts only a set amount of disk space to the Recycle Bin. When the total size of it files excess this set amount, the oldest data are deleted. This deletion method, however, is still the Windows' standard and therefore not secure. In case files were deleted from the Windows Recycle Bin, this function would be the only possibility to make sure they were securely overwritten.

Start from the command line

O&O SafeErase also has a command line version available. You can use it from the Windows command prompt (cmd). This development lends itself nicely to the integration into scripts that then can then be automatically executed on command.



```
Administrator: Command Prompt
C:\Program Files\OO Software\SafeErase>oosecmd.exe
oosecmd.exe      Version 15

USAGE:
    oosecmd.exe [--showdisks] [--deletedrive <Data volume number>] ...
    [--deletevolume <Drive letter>] ... [--freespace <Drive
    letter>] ... [--analyse <internetfiles|windowsfiles
    |deletedfiles|all>] [--autoclean <internetfiles
    |windowsfiles|deletedfiles|all>] [--internetfiles <cookies
    |favorites|temporary|history|formdata|typedurls|all>]
    [--tempfiles <recent|temporary|thumbnails|recyclebin
    |memorydumps|checkdisk|ftp|all>] [--security <highest|high
    |medium|low|lowest|zero>] [--register <user: user name
    company: company serial: serial number>] [--reportname
    <File name>] [-r] [--match <files|folders|all>] [-y] [-s]
    [--] [-v] [-h] <Files and/or folders> ...

Description:
    --showdisks
        Show drive information.

    --deletedrive <Data volume number>    (multiple use possible)
        Delete disk completely

    --deletevolume <Drive letter>    (multiple use possible)
        Delete drive.

    --freespace <Drive letter>    (multiple use possible)
        Delete free space on a drive

    --analyse <internetfiles|windowsfiles|deletedfiles|all>
        Scan the computer for potential security relevant files (Default: all)

    --autoclean <internetfiles|windowsfiles|deletedfiles|all>
        Remove files found through analysis (default: all)

    --internetfiles <cookies|favorites|temporary|history|formdata|typedurls
    |all>
        Delete temporary internet files (default: all)

    --tempfiles <recent|temporary|thumbnails|recyclebin|memorydumps
    |checkdisk|ftp|all>
        Delete temporary Windows and program files (default: all)

Using the command line version of O&O SafeErase
```

Parameters

To use the O&O SafeErase command line, you must complete the full installation or install the appropriate component.

Navigate in the command line (cmd) to the installation directory of O&O SafeErase. You can then use the parameters listed in the table by calling up oosecmd.exe with the desired parameter.

The parameters in square brackets [] are optional and do not need to be entered. Before deleting, a security prompt is issued which you can automatically agree with by using the -y command.

The individual parameters for O&O SafeErase are described below:

Main parameters

--showdisks

--deletedrive <disk number>

--deletevolume <drive letter>

--freespace <Drive letter>

--analyse [internetfiles]
or [windowsfiles]
or [deletedfiles]
or [all]

Explanation

Show disk drive information

Example:

```
ooscmd.exe --showdisks
```

Securely delete disk

The O&O SafeErase Server and Workstation Editions allow you to delete multiple disks using one command.

Example:

```
ooscmd.exe --deletedrive 1
```

Only in Workstation and Server Editions:

```
ooscmd.exe --deletedrive 1  
deletedrive 2
```

Securely delete drive The O&O SafeErase Server and Workstation Editions allow you to delete multiple drives using one command.

Example:

```
ooscmd.exe --deletevolume d:
```

Only in Workstation and Server

Editions: ooscmd.exe --deletevolume d:
deletevolume e:

Securely delete free space of a drive. The O&O SafeErase Server and Workstation Editions allow you to delete free space on multiple drives using one command.

Example:

```
ooscmd.exe --freespace g:
```

Only in Workstation and Server

Editions: ooscmd.exe --freespace g:
freespace f:

Scan computer for potentially security relevant or unsafe deleted files. (Default: All file types are scanned and counted)

internetfiles: Only temporary Internet files are scanned and counted.

windowsfiles: Only temporary Windows files are scanned and counted.

deletedfiles: Only unsafe deleted files will be scanned and counted.

all: All three file types are scanned and

```
--autoclean [internetfiles]  
or [windowsfiles]  
or [deletedfiles]  
or [all]
```

```
--internetfiles [cookies]  
or [favorites]  
or [temporary]  
or [history]  
or [formdata]  
or [typedurls]  
or [all]
```

```
--tempfiles [recent]  
or [temporary]  
or [thumbnails]  
or [recyclebin]  
or [memorydumps]  
or [checkdisk]  
or [ftp]  
or [all]
```

```
--register <"user:user name
```

counted.

Example:

```
oossecmd.exe --analyze deletedfiles
```

Securely delete files found by analysis. (Default: All found file types will be permanently deleted)

Example:

```
oossecmd.exe --autoclean  
windowsfiles
```

Securely delete temporary Internet files.
(Default: All Internet files that are found will be deleted)

cookies: deletes only cookies.

favorites: deletes only set favorites.

temporary: Deletes only temporary Internet files.

history: Deletes only browsing history.

formdata: Deletes only form data saved in the browser such as username/password.

typedurls: Deletes only entered Internet addresses.

all: Deletes all Internet files that are found

Example:

```
oossecmd.exe --internetfiles  
cookies --internetfiles history
```

Delete temporary Windows and program files
(Default: All file types that are found will be Securely deleted)

recent: Permanently deletes temporary files from programs.

temporary files: Deletes files in the Windows TEMP folder.

thumbnails: Permanently deletes the picture preview from the cache.

recyclebin: Deletes content from the Windows Recycle Bin.

memorydumps: Deletes DMP files.

checkdisk: Deletes files that were saved by CheckDisk (CHK).

ftp: Deletes saved login data from an FTP server.

all: Deletes all temporary file types that are found.

Example:

```
oossecmd.exe --tempfiles recyclebin
```

Register product

```
company:company Serial: Serial
number">
```

```
--match [files]
or [folders]
or [all]
```

```
-v or --version
```

```
-h
```

```
<Files and/or folders>
```

Example:

```
oossecmd.exe --register „user:max
company:any company serial:xxx...”
```

Important: Please use quotation marks with the registration data, otherwise the registration will fail!

Delete files and folders that match the file filter

Example:

```
oossecmd.exe -match files
c:\test*.*
```

Deletes only files in folder c:\test

Information of the program version

Example:

```
oossecmd.exe --version
```

Shows all available commands and their explanation.

Example: `oossecmd.exe -h`

List of files and folders to be permanently deleted.

Example:

```
oossecmd.exe c:\test*.*
c:\test2\pic.jpg
d:\wordworddocument.doc
```

Additional parameters can be used in combination with main parameters. A main parameter can be assigned several additional parameters.

Additional parameters

```
--security [highest]
or [high]
or [medium]
or [low]
or [lowest]
or [zero]
```

```
--createreport or -r [plus
--reportname <file name>]
```

```
-y or --yes
```

Explanation

Optional: Set the used security level:

highest: Highest security level

high: High security level

medium: Medium security level

low: low security level

lowest: Lowest security level

zero: Overwrite with zeros

Example:

```
oossecmd.exe --deletevolume d:
--security zero
```

A report is created for every activity performed by O&O SafeErase.

Example:

```
oossecmd.exe --create report or
oossecmd.exe -r --report name
d:\test.html
```

Optional parameter: Answer all security prompts

automatically with "Yes".

Example:

```
oosecmd.exe --tempfiles all -y
```

No display

`-s` or `--silent`

You can also build a command sequence from the parameter. You will be able to combine an activity, such as delete free space with as many different options you like, for example:

Example

```
oosecmd.exe --freespace g:  
--security medium --createreport  
--reportname d:\test.html
```

```
osecmd.exe --tempfiles all  
--security zero --createreport  
--reportname d:\test_1.html
```

```
oosecmd.exe c:\Application\CV.doc  
d:\Pictures\Passport_picture.jpg
```

Explanation

The free space in drive G: will be Securely deleted using the deletion method "medium security". Afterwards, a report on the deletion will be created and saved on Drive D: with the name "test.html".

All temporary Windows and program files will be overwritten with zeros. Afterwards, a report on the deletion will be created and saved on Drive D: with the name "test_1.html".

The file "CV.doc" in the folder "Application" on Drive C:, the file "Passport_picture.jpg" in the folder "Pictures" on Drive D: will be Securely deleted using the preset default method.

Note

Please note that when entering the parameter in the command line, **no** manual line break may be included in the command sequence. Otherwise, the command will not be executed as intended. The line breaks in the examples are caused by the document's formatting.

Frequently asked questions

In the following chapters you will find answers to some frequently asked questions. More information can also be found in the support section on our website ([FAQ](#)).

O&O Support-Forum

In the support forum you will find help and advice as well as answers to frequently asked questions firsthand. [Visit O&O Support Forum](#)

How you can check on the deletion process

As soon as data is erased, they cannot be displayed anymore. However, unless data is Securely deleted, the data is still accessible.

If you run the analysis function after the deletion, you will see the remaining files.

The success of O&O SafeErase can also be measured with special data rescue programs. You can use O&O DiskRecovery for this purpose. These program will show you what data may be restored. You can download O&O DiskRecovery as trial versions for free from our Website.

More information about their use can be found in their respective user handbooks. If you have any questions. don't hesitate to contact us.

How you can SafeErase data, which already has been deleted

If you already have deleted data before installing O&O SafeErase, which you would like to securely delete retroactively, you can delete the free space to do so. Through this process all free disk space is overwritten and already deleted files annihilated, making it possible to remove any trace of sensitive data you thought had already been erased. Securely delete free space prevents the restoration of already deleted data by employing a special restoration product.

How to act when receiving error notices

O&O SafeErase can display error messages for various reasons during the deletion process.

These messages are also noted in the report. In most cases O&O SafeErase is not able to access the files intended for deletion. This is the case, whenever other programs are still using these files. They will not be deleted.

- If in doubt, restart your computer and run the deletion again.
- You will raise the chance for a successful deletion, if you keep other programs closed while the deletion is under way.

Safely delete data from solid state drives

O&O SafeErase includes the feature SolidErase, which was developed especially for the deletion of SSDs. SolidErase uses resources sparingly and thoroughly so that the data is not recoverable and the SSD is exposed to the least possible strain.

The need for a custom developed feature for SSDs resulted from the different implementations of the manufacturers of functions such as TRIM, Sanitize and SecureErase. In addition, not all manufacturers and SSD controllers support the functions mentioned.

To offer you a reliable solution which can be used for most all manufacturers and models available, we have now developed our own feature "SolidErase" in O&O SafeErase, which deletes SSDs smoothly and safely.

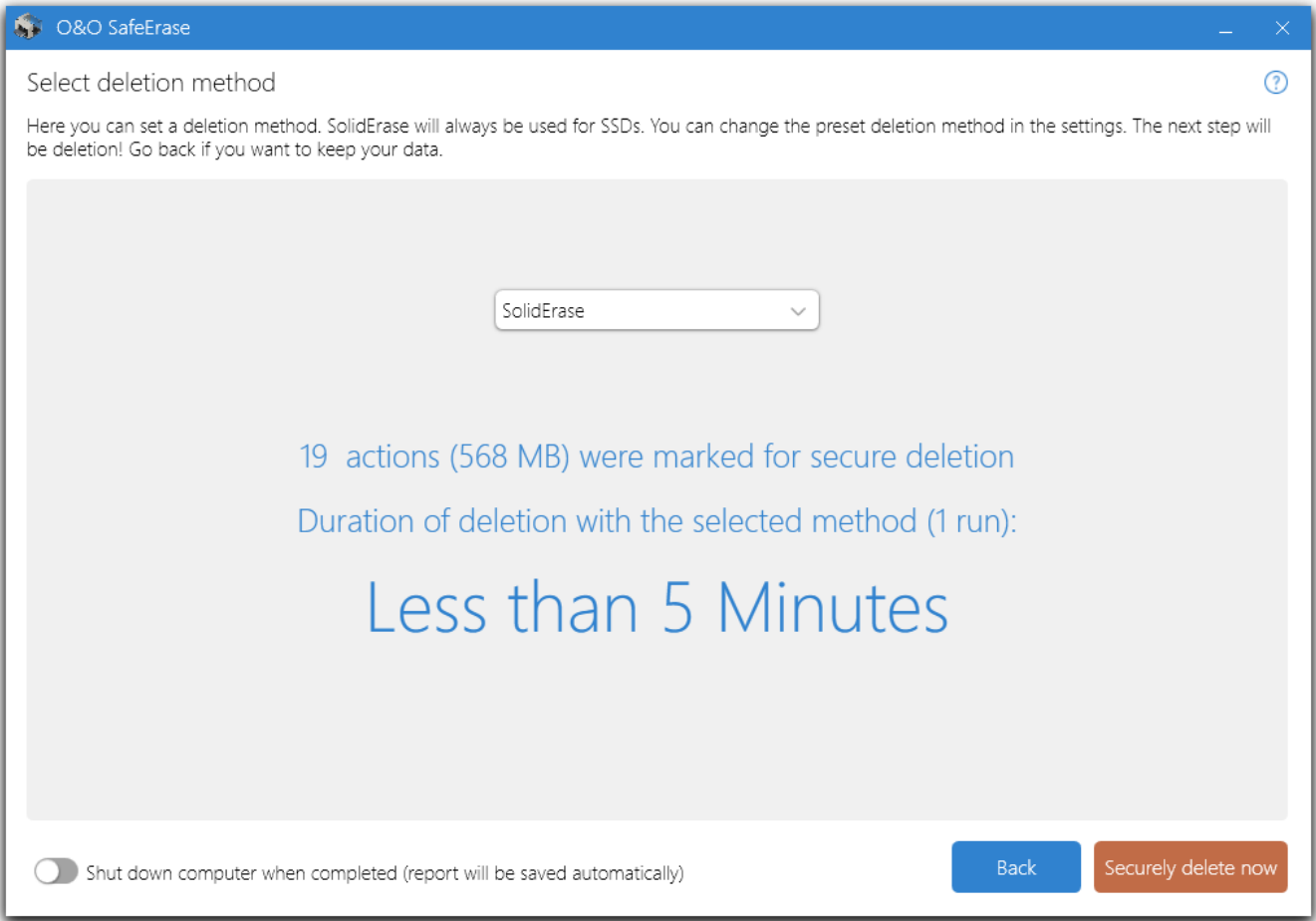
There is no need to adjust or make further settings to use this function as O&O SafeErase recognizes SSDs automatically and selects the correct deletion method. SolidErase is based on our fast and effective method "Overwriting with Random Data", because here only one write operation is performed on the SSD, so it is not overburdened. This also guarantees that afterwards no data may be found or recovered.

Note:

If you have exclusively selected SSDs for deleting hard disks or partitions, the deletion methods options are deactivated because you no longer need them. SolidErase recognizes your SSD and chooses the correct deletion method automatically.

Note:

In addition, it's possible to turn off the special SolidErase method for deleting SSDs and instead, delete them using a different deletion method. SolidErase was, however, developed especially to protect and extend the lifespan of SSDs. This is why using SolidErase on SSDs is recommended.



Safely delete data from Solid State Drives

End user license agreement

O&O Software GmbH

End User License Agreement 5.7.3 (EULA)

GENERAL SECTION and SPECIALIZED SECTION

GENERAL SECTION

IMPORTANT - PLEASE READ CAREFULLY

This End User License Agreement (EULA) is organized into 2 sections: a general part, which is valid for all O&O products, and a specialized part, which includes the particular terms of each corresponding product. By accepting both parts of the license terms they automatically form part of your contract with O&O Software, Bülowstraße 66, 10783 Berlin.

Once accepted, these license terms will become part of your contract with O&O Software, Bülowstraße 66, 10783 Berlin.

If you have any questions regarding this contract and the license terms, our Service Team is available to help you under info@oo-software.com. The software product is protected by copyright laws and international copyright contracts as well as other laws and agreements concerning intellectual property.

1. Object and form of delivery

(1) You receive the software covered by the contract in executable for (Binary code) together with the relevant documentation released by O&O according to Section (6).

(2) The software provides the range of functions described in the given documentation. The documentation regarding functionality may be consulted prior to concluding the contract in the internet presentation on the following site www.oo-software.com.

(3) Delivery will be made according to the way in which you have purchased the software, either by having a disk directly handed over, or sent by mail to an address you have supplied, or through the forwarding of a license as well as any required download information to a given E-mail address.

(4) If you are currently receiving updates as part of a maintenance agreement, these will be made available electronically to you for downloading.

(5) Changes to the delivery or E-mail address can only be considered, if they are supplied in writing or by E-mail to the address or E-mail address indicated on www.oo-software.com at least two weeks before delivery of the update.

(6) A printed copy of the documentation will not be included in the delivery. The documentation consists primarily of electronic aids.

2. Requirements for application (system requirements)

(1) Installation of the software is not part of the agreement.

(2) Depending on the software, there are certain system requirements that must be met in order to use it according to the terms of this contract. These will be defined according to each product in the specialized section of this contract.

3. Rights of use, including test versions, unauthorized transfer, and application

(1) O&O grants you, upon payment of the agreed one-time fee, a permanent, spatially unlimited and non-exclusive right to use the software.

(2) Test versions - if you have installed a test version of one of our products taken from the O&O Website www.oo-software.com, the right of use will be, according to the program, for a limited time only and/or technically restricted.

(3) One copy of the software is entitled to be used on a maximum of one (1) output device /workstation simultaneously.

(4) If you want to use the software on more than one output device/workstation, the rights of use must be extended accordingly. To find out which O&O products are also available as volume licenses, please consult www.oo-software.com. The separate price list concerning O&O Volume Licenses will apply to extending the rights of use without redelivery. A subsequent extension of the rights of use without redelivery does not result in further warranty.

(5) Any use beyond that agreed upon in the contract is one in violation of the contract. In such a case, you are required to report this use that exceeds the rights of use to the supplier without any delay. The parties will then try to bring about an agreement for extending the rights of use. For the duration of the excessive usage, i.e., until the conclusion of such an agreement or the cessation of the excessive usage, you are required to pay compensation for this excessive usage according to the amount indicated in our price lists. The amount of compensation will be calculated on the basis of a four year, straight-line depreciation. If we are not informed of the excessive usage, a contract penalty in the amount three times the price of the usage indicated in the price list will be due to O&O.

(6) You are entitled to create a backup copy of the software and to conduct ordinary data backups. The creation of more copies than the amount needed for the backing up of any future usage (including the backup copies and data backups) is not allowed.

(7) Copyrights and other trademarks within the software may not be altered or removed. They must be transferred onto every copy of the software.

(8) Unauthorized transfer - only when you have purchased the software with an accompanying disk are you permitted to transfer it and then, only under the following conditions: a resale of the software is only permitted when it involves an entire software copy, i.e., by surrendering your own usage of the purchased copy, you are entitled to transfer these rights of use of the disk onto a third party according to the terms of the agreement existing between you and O&O. When making such

a transfer, you are required to hand over to the third party all materials related to the software that are covered in the contract and to delete the software from any storage volumes (e.g., hard disks) remaining in your possession.

(9) Unauthorized rental and service - The purchase of this contract does not entitle you to any public transfer or rental of the software. You are also not entitled to include the software as part of your providing services for and in the presence of any third parties. You may purchase an appropriate license from O&O for doing this.

(10) Prohibition on Reverse Engineering, Decompilation, and Disassembly. You may not reverse engineer, decompile, or disassemble this software except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation.

(11) Compliance with Applicable Laws. You must comply with all applicable laws regarding use of software.

4. Payment

(1) The prices are given with the corresponding sales taxes included, unless otherwise indicated.

(2) Test versions - Downloads of test versions offered by O&O are provided free of charge, unless otherwise indicated.

(3) If you receive updates of your programs as part of a Maintenance Agreement, the terms of payment in these contracts will apply to these Maintenance Agreements.

(4) O&O is entitled to forward any data it has received onto third parties requiring it for purposes of collection.

(5) Until payment is made in full, O&O retains possession of all rights, particularly those concerning copyrighted rights of use, on the materials included in this contract. O&O is specifically entitled to cancel a contract, for example, when your payment is delayed, it prohibits the further using of the software and demands the surrendering of all copies or this being impossible, to demand their deletion. Should a third party have access to the object of purchase before payment is completed for the contractual software, you are required to inform this third party about the object being the property of O&O and to inform O&O, in writing, about the third party's access.

5. Material defect and defect of title

(1) The software package or download you receive is free of any material defect or defect of title.

(2) A material defect exists when the software is unable to be used as described in the documentation appearing on the website www.oo-software.com and included in delivery or available for downloading. O&O is constantly checking to make sure that other sources are not misrepresenting the functions and properties of the software as described in the documentation. You can therefore assume that any descriptions beyond those found in the software documentation have not originated with O&O and are also unknown to it. Please inform O&O if you learn of any software descriptions that include functions and properties not mentioned in the

documentation.

(3) A defect of title exists when, after delivery of the software, the rights needed for using it as stipulated in the contract have not been effectively granted.

(4) Any claims concerning defects of material and/or title related to the software have a limitation period of two years subsequent to delivery of the program or transmission of the serial number needed for downloading. If you are not a private individual, the warranty period is shortened to one year. If O&O has fraudulently concealed a material defect, a three year limitation period will cover claims related to this defect. Payment for compensation that you might have been entitled to as a result of cancellation or an abatement can be refused upon expiration of the limitation period.

(5) You are required to inform O&O, in writing if possible, of any defects that arise immediately upon their discovery. While doing so you should also describe, as well as possible, how the defect is communicated, the effect it has on the program, and under which circumstances it occurs.

(6) Should defects be reported to O&O within the limitation period, it will undertake a cure free of charge.

(7) As part of the cure, the corrected software will be redelivered as agreed. An on-site analysis and correction of the error on your system will not take place. O&O assumes the ensuing expenses for the cure, in particular the costs for transport, labor, and material. You are personally responsible for installation. O&O specifically does not assume on-site installation as part of its obligation with regard to defects of material or title. Should a change of the program be required as part of the cure, O&O will make the necessary changes in the documentation without any charges.

(8) After the unsuccessful expiration of a deadline you set for cure, you can cancel the contract or reduce the purchase price and demand compensation instead of service or the replacement of any futile expenditures.

(9) A deadline is not required when a) O&O refuses both kinds of cure, even if it is entitled to do so as a result of the arising expenses, or b) the cure is impossible, or c) the cure is unacceptable to you, or d) the cure is unsuccessful.

A subsequent improvement is considered a failure after the second unsuccessful attempt, unless there is something particular about the type of software or the defect itself or the surrounding circumstances that would indicate otherwise.

(10) You are not entitled to cancel the contract if the defect is negligible, nor may you, in this event, demand compensation instead of full service.

(11) In the event of cancellation, compensation is due for any uses made. The compensation for use will be based on a four year, straight-line depreciation of the purchase price.

(12) As a result of the abatement, the purchase price will be reduced by the amount which is calculated for deducting the defect from the value of the software. The standard used will be its

value at the time the contract was concluded. The amount, when necessary, is to be calculated by estimation. As a result of this reduction, any amount larger than that paid for the reduced purchase price will be refunded.

(13) If it turns out that a reported problem did not arise as a result of a defect in the software, O&O is entitled to invoice you, according to the amount charged in its price lists for such services, the expenses for analysis and correction of the problem if you can be accused of malice or gross negligence.

(14) The seller's warranty is canceled, when changes are made on the software without expressed written consent or when the software is not used as intended or used in an improper software environment, unless you can prove that these facts had nothing to do with the problems that occurred.

6. Limitation of compensation

(1) O&O is liable for compensation for every legal ground to the extent described in the following provisions.

(2) The extent of liability of O&O for damages caused by malice or gross negligence arising from O&O itself or one of its vicarious or legal agents is unlimited.

(3) There is no limit to the extent of liability of O&O or any of its legal or vicarious agents for damages involving injury to life, physical well-being or health, or for simple breach of duty.

(4) There is unlimited liability for damages caused by serious organizational fault on the part of O&O as well as for damages arising from a missing guaranteed characteristic.

(5) For the breach of an essential contractual duty, O&O is liable for damages normally foreseen in a contract when none of the instances in provisions (2) - (4) applies.

(6) Any further liability for compensation is excluded, specifically excluded is liability without fault.

(7) Liability as defined by the product liability law remains untouched.

(8) If damage can be traced to have arisen through a fault on the part of O&O as well as on the part of yourself, you must have your share of the fault evaluated.

You are responsible for making a standard backup of your data at least once a day. For data loss caused by O&O, O&O is only liable for the expense of duplicating the data on your backup copies that need to be created and for the restoration of data, which would have also been lost during a standard backup procedure.

7. Final provisions

(1) You may only balance claims from O&O with indisputable or legally valid claims.

(2) Changes and amendments to this contract must be made in writing. This also applies to

changes to this provision.

(3) The contract is subject to German law. The uniform UN purchasing law (CISG) as well as the UNIDROIT Factoring Agreement of Ottawa do not apply.

(4) Any general terms and conditions on your part will not be applied.

(5) This license agreement is subject to the laws of the Federal Republic of Germany. In the event you are not a private individual or a resident of the Federal Republic of Germany, we agree that the district court in Berlin will be the competent court for litigation arising from this contract.

8. Contact

If you have any questions concerning the O&O Software License Agreement or wish to speak with O&O, please get in touch with us.

O&O Software, Bülowstraße 66, 10783 Berlin, Germany

E-Mail: info@oo-software.com / sales@oo-software.com, Web: www.oo-software.com

SPECIALIZED SECTION

O&O BlueCon

Amendment to: 2. Requirements for application (system requirements)

The software requires Windows 8.1 (all Editions), Windows Server 2012 R2 (all Editions), Windows 10 (all Editions), Windows Server 2016 (all Editions) or Windows Server 2019 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

The product at hand can only be employed according to the acquired license. The following license types exist for O&O BlueCon:

O&O BlueCon Admin Edition

You are authorized to use the software product on all computers a) in the possession of the company (legal person or natural person(s) in the case of corporations) owning the license and b) all located at a single site. This software product may be used only via the corresponding bootable medium that was either purchased or that you created. Separate installation of the software product itself or any of its components on individual computers is not part of this licensing agreement. This license is bound to a single natural person and is non-transferable.

O&O BlueCon Tech Edition

You are authorized to use the software product on all computers. This includes computers not owned by the company of the licensee (also known as Service Technician's License). This software product may be used only via the corresponding bootable medium that was either purchased or that you created. Separate installation of the software product itself or any of its components on individual computers is not part of this licensing agreement. This license is bound to a single natural

person and is non-transferable.

O&O BuildPE

Important note for working with O&O BuildPE

The program overwrites the target storage volume (these volumes include re-writable CDs or USB Sticks, amongst others). Please therefore make absolutely sure that the target volume does not contain any data that you may still require, as the overwriting of this data cannot be reversed!

O&O formally declares that it is not responsible for damages arising from the improper use of O&O BuildPE.

Amendment to: 2. Requirements for application (system requirements)

The software requires Windows 10 (all Editions) or Windows Server 2019 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

O&O CleverCache

Amendment to: 2. Requirements for application (system requirements)

O&O CleverCache Professional Edition

The software requires Windows 7 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

O&O CleverCache Server Edition

The software requires Windows Server 2008 (all Editions), Windows 7 (all Editions) or Windows Server 2008 R2 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

O&O Defrag

Amendment to: 2. Requirements for application (system requirements)

O&O Defrag Professional Edition

The software requires Windows 8 (all Editions) or Windows 10 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. Control of the program through a network management is not possible.

O&O Defrag Workstation Edition

The software requires Windows 8 (all Editions) or Windows 10 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. The O&O Defrag Workstation Edition may be used on computers with or without the user interface. You are entitled to control this program over the separately obtainable network manager.

O&O Defrag Server Edition

The software requires Windows 8 (all Editions), Windows Server 2012 (all Editions), Windows Server 2012 R2 (all Editions), Windows 10 (all Editions), Windows Server 2016 (all Editions) or Windows Server 2019 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. The O&O Defrag Server Edition may be used on computers with or without the user interface. You are entitled to control this program over the separately obtainable network manager.

O&O Defrag Virtual Machine Edition

The software may only be used on the appropriate operating system in accordance with the previously mentioned conditions for the Workstation and Server Editions. You must own a minimum of one Server Edition to use a Virtual Machine Edition.

O&O DiskImage

Amendment to: 2. Requirements for application (system requirements)

O&O DiskImage Express Edition

The software requires Windows 8 (all Editions) or Windows 10 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. Control of the program through a network management is not possible.

O&O DiskImage Professional and Special Edition

The software requires Windows 8 (all Editions) or Windows 10 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. Control of the program through a network management is not possible.

O&O DiskImage Workstation Edition

The software requires Windows 8 (all Editions) or Windows 10 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. The O&O DiskImage Workstation Edition may be used on computers with or without the user interface. You are entitled to control this program over the separately obtainable network manager.

O&O DiskImage Server Edition

The software requires Windows 8 (all Editions), Windows Server 2012 (all Editions), Windows Server 2012 R2 (all Editions), Windows 10 (all Editions), Windows Server 2016 (all Editions) or Windows Server 2019 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. The O&O DiskImage Server Edition may be used on computers with or without the user interface. You are entitled to control this program over the separately obtainable network manager.

O&O DiskImage Virtual Machine Edition

The software may only be used on the appropriate operating system in accordance with the previously mentioned conditions for the Workstation and Server Editions. You must own a minimum of one Server Edition to use a Virtual Machine Edition.

Amendment to: 3. Rights of use, including test versions, unauthorized transfer, and application

Creation and restoration of images

The source computer and each target computer are required to hold licenses, to create and restore images using O&O DiskImage. One license is sufficient under the previously mentioned terms, if the source and the target computer is one non-virtual workstation. Each virtual machine is seen as an independent computer; in other words, each virtual machine needs its own license.

O&O DiskRecovery

Amendment to: 2. Requirements for application (system requirements)

The software requires Windows 8 (all Editions), Windows Server 2012 (all Editions), Windows Server 2012 R2 (all Editions), Windows 10 (all Editions), Windows Server 2016 (all Editions) or Windows Server 2019 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

The product at hand can only be used according to its acquired license. The following license types exist for O&O DiskRecovery:

O&O DiskRecovery Professional Edition

You are authorized to install and use the software product on only one computer. This should be used wholly in conjunction with all hardware in your possession, i.e. this license may not be used to provide a service to a third party. Other limitations may apply in the software itself. Please consult the software documentation for more information on these limitations.

O&O DiskRecovery Admin Edition

You are authorized to install and use the software product on all computers a) in the possession of the company (legal person or natural person(s) in the case of corporations) owning the license and b) all located at a single site. This should be used wholly in conjunction with all hardware in your possession, i.e. this license may not be used to provide a service to a third party. This license is bound to a single natural person and is non-transferable.

O&O DiskRecovery Tech Edition

You are authorized to install and use the software product on all computers. This includes computers that do not belong to the company owning the license (also known as Service Technician's License). This license is bound to a single natural person and is non-transferable.

O&O DiskStat

Amendment to: 2. Requirements for application (system requirements)

O&O DiskStat Professional Edition

The software requires Windows 7 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

O&O DiskStat Workstation Edition

The software requires Windows 7 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. The O&O DiskStat Workstation Edition may be used on computers with or without the user interface. You are entitled to control this program over the separately obtainable network manager.

O&O DiskStat Server Edition

The software requires Windows Server 2008 (all Editions), Windows 7 (all Editions) or Windows Server 2008 R2 (all Editions), operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

O&O DiskStat Virtual Machine Edition

The software may only be used on the appropriate operating system in accordance with the previously mentioned conditions for the Workstation and Server Editions. You must own a minimum of one Server Edition to use a Virtual Machine Edition.

O&O DriveLED

Amendment to: 2. Requirements for application (system requirements)

O&O DriveLED Professional Edition

The software requires Windows 7 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. Control of the program through a network management is not possible.

O&O DriveLED Workstation Edition

The software requires Windows 7 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. The O&O DriveLED Workstation Edition may be used on computers with or without the user interface. You are entitled to control this program over the separately obtainable network manager.

O&O DriveLED Server Edition

The software requires Windows Server 2008 (all Editions), Windows 7 (all Editions) or Windows Server 2008 R2 (all Editions), operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. The O&O DriveLED Server Edition may be used on computers with or without the user interface. You are entitled to control this program over the separately obtainable network manager.

O&O DriveLED Virtual Machine Edition

The software may only be used on the appropriate operating system in accordance with the previously mentioned conditions for the Workstation and Server Editions. You must own a minimum of one Server Edition to use a Virtual Machine Edition.

O&O Enterprise Management Console

Important note on the Microsoft SQL Server

This product uses the Microsoft SQL Server or Microsoft SQL Server Express Edition. To the extent

that these programs are part of the installation of this product, the terms of their licensing related to the use of this software will also apply to the terms of this agreement.

The use of Microsoft SQL Server Express Edition is free of charge in conjunction with this product. The purchase of licenses for O&O Enterprise Management Console and related products is separate from any possible purchase of SQL Server products.

Amendment to: 2. Requirements for application (system requirements)

The software requires Windows 8 (all Editions), Windows Server 2012 (all Editions), Windows Server 2012 R2 (all Editions), Windows 10 (all Editions) or Windows Server 2016 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

O&O EventViewer

Amendment to: 2. Requirements for application (system requirements)

O&O EventViewer Workstation Edition

The software requires Windows 8 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems. The O&O EventViewer Workstation Edition may be used on computers with or without the user interface. You are entitled to control this program over the separately obtainable network manager.

O&O EventViewer Server Edition

The software requires Windows 8 (all Editions) or Windows Server 2012 operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

O&O EventViewer Virtual Machine Edition

The software may only be used on the appropriate operating system in accordance with the previously mentioned conditions for the Workstation and Server Editions. You must own a minimum of one Server Edition to use a Virtual Machine Edition.

O&O FileDirect

Amendment to: 2. Requirements for application (system requirements)

The software requires Windows 10 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

Amendment to: 3. Rights of use, including test versions, unauthorized transfer, and application Distribution. You may make exact, unmodified copies of this Software Product and distribute such copies solely by electronic means for example, posting on Internet sites for others to download), subject to the following (a) that the software is distributed unmodified (wrapping or packaging the software with a so-called "Installer", "Wrapper" or similar constitutes a forbidden modification for the purposes of this contract) and in its entirety with its complete user documentation, readme files, copyright, trademark, and other indications protecting intellectual property including this

license agreement, and all of its other components), and (b) that such transfer may occur anywhere in the world, except when prohibited by laws of the Federal Republic of Germany (directly or indirectly.)

Amendment to: 4. Payment

O&O demands no fee for the use of O&O FileDirect. In addition, a fee for this license and this program may not be demanded by any Third Parties, unless this is done with the expressed approval of O&O. When in doubt, please get in touch with us. You can find our contact data at the end of this license agreement.

O&O MediaRecovery

Amendment to: 2. Requirements for application (system requirements)

The software requires Windows 8 (all Editions) or Windows 10 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

O&O PartitionManager

Amendment to: 2. Requirements for application (system requirements)

O&O PartitionManager Professional Edition

The software requires Windows 7 (all Editions) operating systems. Usage within the terms of this contract is not achieved without the application of these operating systems.

O&O PartitionManager Server Edition

The software requires Windows Server 2008 (all Editions), Windows 7 (all Editions) or Windows Server 2008 R2 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

O&O RegEditor

Important note for working with the Microsoft Windows Registry

Before making changes to the Microsoft Windows Registry (in the following Registry), you should prepare a backup copy of the Registry and ensure that you'll be able to restore the Registry if a problem should arise.

O&O formally declares that it is not responsible for damages arising from the improper use of O&O RegEdit. Changes to the Registry should only be made by experienced users who are aware of the consequences of such changes. A defective Registry can influence the entire stability of the system and lead to a crash of the computer or make it unable to start. This can further lead to loss of data.

Amendment to: 2. Requirements for application (system requirements)

The software requires Windows 8 (all Editions), Windows Server 2012 (all Editions), Windows Server 2012 R2 (all Editions) or Windows 10 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

Amendment to: 4. Payment

O&O demands no fee for the use of this license. In addition, a fee for this license and this program may not be demanded by any Third Parties, unless this is done with the expressed approval of O&O. When in doubt, please get in touch with us. You can find our contact data at the end of this license agreement.

O&O RescueBox

Amendment to: 2. Requirements for application (system requirements)

The software requires Windows Server 2008 (all Editions), Windows 7 (all Editions) or Windows Server 2008 R2 (all Editions), operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

The product at hand can only be used according to its acquired license. The following license types exist for O&O RescueBox:

O&O RescueBox Personal Edition

You are authorized to install and use the software product on only one computer. This should be used wholly in conjunction with all hardware in your possession, i.e. this license may not be used to provide a service to a third party. Other limitations may apply in the software itself. Please consult the software documentation for more information on these limitations.

O&O SafeErase

Amendment to: 2. Requirements for application (system requirements)

O&O SafeErase Professional Edition

The software requires Windows 8 (all Editions) or Windows 10 (all Editions) operating systems. Usage within the terms of this contract is not achieved without the application of these operating systems.

O&O SafeErase Workstation Edition

The software requires Windows 8 (all Editions) or Windows 10 (all Editions) operating systems. Usage within the terms of this contract is not achieved without the application of these operating systems.

O&O SafeErase Server Edition

The software requires Windows 8 (all Editions), Windows Server 2012 (all Editions), Windows Server 2012 R2 (all Editions), Windows 10 (all Editions), Windows Server 2016 (all Editions) or Windows Server 2019 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

O&O SafeErase Admin Edition

You are authorized to install and use the software product on all computers a) in the possession of the company (legal person or natural person(s) in the case of corporations) owning the license and

b) all located at a single site. This should be used wholly in conjunction with all hardware in your possession, i.e. this license may not be used to provide a service to a third party. This license is bound to a single natural person and is non-transferable.

O&O SafeErase Edition

You are authorized to install and use the software product on all computers. This includes computers that do not belong to the company owning the license (also known as Service Technician's License). This license is bound to a single natural person and is non-transferable.

O&O SSD Migration Kit

Amendment to: 2. Requirements for application (system requirements)

The software requires Windows 7 (all Editions) or Windows 8 (all Editions) operating systems. Application within the terms of this contract is not achieved without the use of one of these operating systems.

Contact

If you have any questions concerning the O&O Software License Agreement or wish to speak with O&O, please get in touch with us.

O&O Software, Bülowstraße 66, 10783 Berlin, Germany

E-Mail: info@oo-software.com / sales@oo-software.com, Web: www.oo-software.com