

JamSoftware

TreeSize

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1 Overview

TreeSize is a powerful and flexible hard disk space manager for Windows.

Why TreeSize:

- Manage and clean up disk space efficiently
- Visualize disk usage
- Analyze in detail, down to all directory levels
- Find and remove redundant files
- Numerous export and reporting possibilities

Manage disk space and scan your hard disks

Find out which folders are the largest on your drives and recover precious disk space. Use TreeSize as a hard disk cleanup tool: find space hogs and remove them. Graphical analyses provide a quick visualization of disk space usage. TreeSize shows you folder size and allocated disk space as well as owner and permissions, the last access date, the NTFS compression rate, and much more information for selected folders or drives.

Search for Redundant Files

The integrated versatile [file search](#)^[97] helps you find old, big, temporary, and duplicate files on drives, entire servers or the entire network. Search results can be moved, deleted or exported to a ZIP file.

Print or Export Results

You can print detailed reports or export the collected data to different formats (XML, XLS, TXT, CSV and many more). TreeSize also enables you to track disk space usage development over time via XML report comparison or snapshots.

The application has an intuitive Explorer-like user interface and supports drag-and-drop. It is fast, multi-threaded and supports Unicode- and NTFS-specific features. TreeSize can be started from the context menu of every folder or drive.

[Take a visual tour](#) or read our [product data sheet](#) to learn how to manage disk space with TreeSize.

2 Installation

To install TreeSize, execute the setup file and follow the instructions. TreeSize requires Windows Vista/2008 or upwards as well as the .Net framework 4.5, which will be installed automatically when missing (Information regarding disk space management on other operating systems can be found on: <https://www.diskspacemanagement.com/>). The setup program will copy the necessary files to your hard disk and will create a new program group in the Start menu/screen. TreeSize can be uninstalled using the Software applet in the Windows Control Panel. You will find the installation key for the registered version on the license document (PDF) sent to you after the purchase. During your maintenance period the key will be provided in your customer area.

A portable installation on USB removable device can be created using the [ribbon bar "Tools"](#) ²⁶.

Unattended Installation

Starting the *EXE-based installer* with the command line parameters

```
/SILENT /SUPPRESSMSGBOXES /PASSWORD=YourInstallKey
```

will perform a silent and automatic installation with the default settings. Please replace `YourInstallKey` with the installation key that you received after your registration. Using `/VERYSILENT` instead of `/SILENT` will prevent any visual feedback. The option `/DIR="x:\dirname"` can be used to override the default install path.

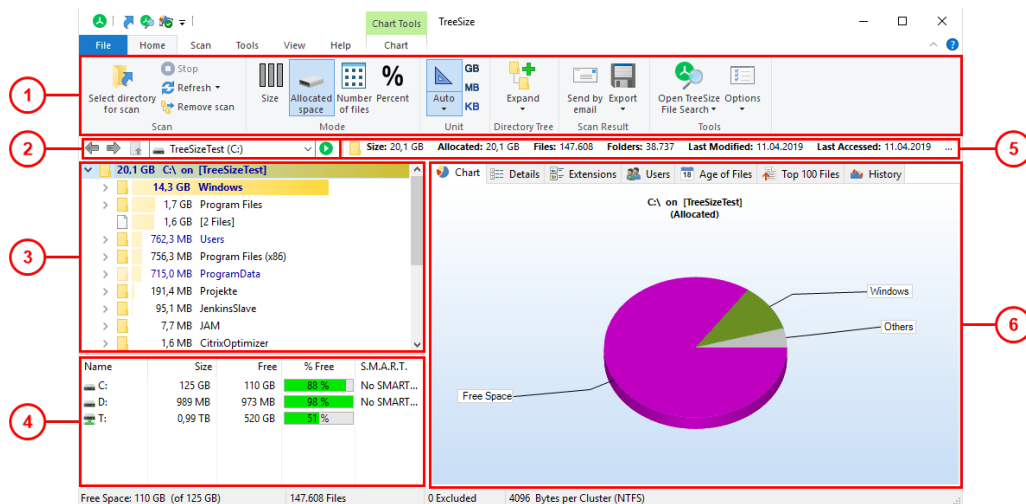
Customer with 25 or more licenses are able to download a 64Bit MSI installer in our [customer area](#). To perform a silent and unattended installation using the *MSI-Installer*, you need to use a command line like this for MsiExec:

```
msiexec /qn /i "TreeSizeProfessional-x64-Full-EN.msi"  
INSTALLATION_KEY="XXXXXX-XXXXXX-XXXXXX-XXXXXX-XXXXXX"
```

Please prefix the MSI file with the path of the network share, in which the MSI file is stored, and adjust the installation key. You may also set the property `INSTALLATION_KEY` by modifying the MSI file using a tool like [Orca](#).

3 Quickstart

After the installation, TreeSize can be started using the Windows Start menu/screen or the context menu of a folder or drive. These are the important elements of the TreeSize main window:



1 The Ribbon Bar provides access to all commands of TreeSize. It is divided into logical sections such as the "[Home](#)"^[22] tab containing commonly used functions and elements, or the "[View](#)"^[27] tab enabling you to customize the appearance of TreeSize. The colored tab to the right is a context-sensitive depending on the currently active view. Use the "**Select directory for scan**" to start the scanning process for a drive or folder.

2 This section contains a drop-down list enabling you to select a drive or folder to be scanned. You can enter paths directly in the control field. Press enter or click the scan button on the right to start a scan for the entered path. TreeSize will remember recently used paths and add them to the list.

3 The [Directory Tree](#)^[31] of the scanned folder or drive provides an immediate overview of the size of each folder.

4 The [Drive List](#)^[56] provides an overview of all local and mapped network drives. Additional network drives can be added using the context menu. Double-click on a drive to start a scan in TreeSize.

5 This section will provide additional information regarding the scanned path (e.g. its total size and the number of folders contained).

6 The view section contains several different tabs, each of them providing a highly specialized data view of the currently selected drive or folder. As soon as a view is activated, the corresponding context tab will become active on which you will find useful commands for this view. These are the available views of TreeSize:

- The "[Chart](#)"^[34] view **visualizes folder information** either as a "[Pie Chart](#)"^[36], "[Bar Chart](#)"^[38] or as a "[Tree Map](#)"^[39].
- The "[Details](#)"^[40] view will provide you **detailed information on all files and folders** contained in the current selected item in the [Directory Tree](#)^[31]
- The "[Extensions](#)"^[45] view presents information on size grouped by file types. Thus, you'll gain an overview of the types of **files that use up most of the disk space**.
- The "[Users](#)"^[47] view shows information on size grouped by users. You will see at a glance **which user uses how much space** in which folder.

- The "[Age of Files](#)^[49]" view shows the distribution of the **age of scanned files**, based on a certain date attribute.
- The "[Top 100 Files](#)^[51]" view lists the **100 largest files** in the scanned path along with several other details.
- The "[History](#)^[53]" view shows changes in for the scanned path in a line chart.

7 The [Quick Access Toolbar](#)^[21] is a customizable shortcut to many useful functions of TreeSize.

4 What's New

See [What's New online](#).

5 FAQ

5.1 General / Registration

Q: Which operating system does TreeSize run on? What are the system requirements?

A: See chapter "[Installation](#)^[6]".

Q: How can I order TreeSize? What does ... cost?

A: For questions regarding prices please have a look at our [price list](#) and our [ordering FAQ](#).

Q: How many licenses do I need?

A: Please use our [license calculator](#) and check our [license agreement](#).

Q: What is the difference between the Professional and the Personal Edition?

A: Please check our [comparison matrix](#).

Q: What is the difference between the evaluation copy and the full version? Will there be additional features?

A: The evaluation copy allows you to test the software before you buy it. The maximum time to do this is 30 days. Further usage of the software after this period is not permitted and violates the law. In order to allow our customers to fully test our software products, the evaluation copy does not contain functional limitations, except: In the File Search the "Delete/Move/Archive" operation processes only a certain amount of checked files per execution, and the software may remind you from time to time that you should purchase the software after your testing is finished.

Q: I just purchased your product. How do I activate my trial version?

A: You have to download the full version of the software from our [customer area](#). The login data can be found in the email or in the printed license which you have received after the purchase. If you do not have your login data any more, you can request them to be sent to the email address that you have used for purchasing the software.

Q: Why don't you use activation codes that turn the trial version into a full version?

A: We do not work with activation codes because you can find them very easily on the internet. Typically software manufacturers protect against this problem using online activation, but this would make customer dependent on the availability of our activation servers and an internet connection.

We are working with separate trial and full versions instead, where the full version is not freely available for download and must be installed over the trial version. After purchasing our software, customers get an account for our [customer area](#) where they can download the full version for at least 12 months. We will also send a CD at additional cost (can be ordered separately). Our customers will also receive a personalized installation key, with which they can install the full version. Login data and key should be stored in a safe place. Installing the full version over the trial version will preserve your existing data and settings.

Q: Although I have purchased the full version of your software product, it still shows "UNREGISTERED" in the window title. Why?

A: There are 3 possible reasons why "UNREGISTERED" still shows up:

1. You did not download and install the full version from our [customer area](#)
2. You have accidentally installed the trial version again. (Have you been asked for an installation key during installation?)
3. You have installed the full version to a different folder than the trial version which is now still on your disk.

Q: How do I upgrade to the latest version?

A: On the "Help" ribbon bar you can use "Check for update" to check online whether there are updates available. Within your maintenance period you can download the latest version of TreeSize from our [customer area](#). The login details for our customer area have been emailed to you after the purchase and are printed on the license document. To upgrade older versions, simply run the installation file. Your user settings will still be preserved during the upgrade.

Q: Is one user license sufficient if the software is installed on one computer but two or three users may access the software?

A: Basically you need as many licenses as you have PCs, server or clients on which our software is available for execution. If these three users work on the same PC at different times, then one license is sufficient. If they work on three different PCs and start the software there, then you will need three licenses. You can find [the full license information on our website](#).

Q: Can I scan my Linux/Unix servers or my Linux based NAS with TreeSize?

A: TreeSize can scan Linux / UNIX servers using the SSH protocol (see "[Scan Targets](#)"³¹). Alternatively, if [Samba](#) is installed and running on the Linux / UNIX system, then our tools can access a share on this system using its UNC name, e.g. \\ComputerName\ShareName. If the file system on the Linux / UNIX system is accessible through [NFS](#), then it can be accessed if the NFS support for Windows is installed. For Windows 7 higher (Professional / Enterprise Edition) please go to the Control Panel and activate the "Services for NFS" under "Programs and Features > Turn Windows Features on or off". Then you can mount an NFS share to a drive letter using this command:

```
mount \\ComputerName\ShareName N:
```

It might be necessary to create the following registry values if you have trouble connecting the NFS drive:

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\ClientForNFS\CurrentVersion\Default\AnonymousUid as DWORD with the decimal value 10011.

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\ClientForNFS\CurrentVersion\Default\AnonymousGid as DWORD with the decimal value 10012.

Q: Is it possible to monitor specific folders and get notified if their permissions change?

A: With our monitoring tool [Server Sentinel](#), this is possible. It is designed to monitor local resources, as well as server and network services automatically. For more information about [this](#), and other available features, please visit our [website](#).

Q: Is TreeSize able to delete readonly files?

A: If you start TreeSize with administrative privileges, it will try to delete write-protected files when you are removing them from disk. In case this is not possible, e.g. because the file is locked by another application, the file will be marked for deletion. This means that Windows will try to delete the file on the next system restart. Please note that there is a difference between moving files to the recycle bin (shortcut "Del") and removing files from disk (shortcut "Shift" + "Del").

5.2 Main Program

Q: Why is the allocated space that Windows shows in the properties dialog of the drive different to the allocated space reported by TreeSize?

A: Please see our [knowledge base entry](#) for this problem.

Q: Are there any limitations on the amount of data that TreeSize can query at one time?

A: There are no explicit limitations in what TreeSize is able to scan. The more folders the file system tree has that you want to scan, the more free memory will be necessary to store the queried data. You can reduce the memory consumption by turning off the [user statistics](#)^[47], the [file extensions statistics](#)^[45] and/or the [file age statistics](#)^[49] in the [Options](#)^[62] dialog. For large server our product [SpaceObServer](#) may be suitable as well, which stores the collected data in a database on file level.

Q: If the NTFS deduplication (available since Windows Server 2012) is enabled, TreeSize displays some strange values for the size of files and folders. A lot of files have a size of "0 Byte" while a folder called "System Volume Information" requires a huge amount of disk space. What is the reason for this?

A: This is a result of the [Automatic Data Deduplication](#)^[175].

Q: Why can I not see any network drives within TreeSize?

A: Since Windows Vista and later, Microsoft enforces more strict security rules on the operating system. One side effect of this is that you may not see your mapped network drives anymore (Windows 8 and later), or they appear disconnected (typically in Windows Vista and 7) in applications which run with administrator privileges. This is because Windows uses different user

environments for non-elevated and elevated processes. There are some workarounds to gain access to those network drives anyway:

- Do not run TreeSize as administrator unless it is truly needed.
- Manually enter the UNC path (e.g. "\\server\share") for the network drive into the path drop-down list and press enter.
- Use the "Map network drive" or "Add drive or UNC path" dialog from the [Drive List](#)^[56] menu bar.

Q: Why do all files on my disk have the same last access date which is not far in the past?

A: The date values in the file system are maintained by Windows. Windows updates the last access date of a file each time when an application accesses or reads a file. Many backup and anti-virus tools access every file on your hard disk regularly without restoring the prior last access date.

Q: Why doesn't TreeSize include my disk into its calculation, which is mapped to a directory using the Disk Manager of Windows?

A: By changing the option "Follow mount points and symbolic links" in the [Options](#)^[62] of TreeSize, you can control if mount points and symbolic links should be followed or if they should be excluded from the calculations.

Q: What is the easiest way to scan all drives of a remote server?

A: TreeSize accepts wildcards in paths, simply tell TreeSize to scan \Server\?* in the folder combo on the top left or at the command line.

Q: Scanning a server disk via network is very slow. Is it possible to speed up this process?

A: Scanning a drive via network is normally much slower than scanning a local disk because speed of the network is much lower, latency and overhead are higher compared to a local hard disk. Additionally, server drives are usually much bigger and contain more files than local hard disks. But you can use [scheduled Scans](#)^[144] to perform your scans overnight. Network drives and command line options are supported by the Professional Edition only. For continuous analyzing of disk usage on large servers we recommend our product SpaceObserver. It collects the data using a background agent and stores it in a SQL database. It uses less RAM than TreeSize, and it offers more flexible reporting capabilities like historical development because it is built on a database. More information is available at: <https://www.jam-software.com/spaceobserver/>

Q: Is it possible to have the program ignore folders that are less than a certain size when displaying them in the tree?

A: In the context menu of the topmost folder you may choose to hide folders below a certain size. To achieve this, right-click on the topmost icon (or use the "Expand" button on the ribbon bar), select "Expand > Hide Folders smaller than: XX MB".

Q: Is it possible to add the free space to the bar chart?

A: The free space is added to the pie chart if the root of the scanned drive is selected and the according option is activated in the context menu of the pie chart. In other situations (e.g. if a sub-folder is selected or the "Number of files" mode is active), it doesn't make sense to add the free space because the relationship between the free space and the other values displayed is wrong.

Q: Can I scan network drives and hidden shares like " \\Server\C\$" without connecting them to a drive letter?

A: Yes, in the Professional Edition you can use UNC names like "\\SERVERNAME\Share" to access a network drive by entering them in the drive combo box on the top of the main window. You can also use UNC names on the [command line](#)^[156].

Q: I would like to save a set of drives and folders that are scanned each time I start TreeSize. How can I do that?

A: You can specify the startup behaviour of TreeSize in the [Options](#)^[95] dialog. Or you can simply create a shortcut to treesize.exe on your desktop or the Start menu and add those drives and folders to the command line, separated with a space character.

Q: How can I limit a scan to just one user's files?

A: Please make sure that the option "Create Statistics on File Owners" is activated in the [Options](#)^[62] of TreeSize. After the scan is finished please right-click on this user on the "Users" tab and choose "Limit to this user" from the context menu. You may also use the [Custom File Search](#)^[119] to search files of certain users.

Q: Is it possible to perform a silent installation of this software?

A: Yes, please see chapter "[Installation](#)^[6]".

Q: Is it possible to search for file extensions of file types with TreeSize?

A: You can for example apply a [filter](#)^[62] for a scan in the [Options](#)^[64] by adding patterns like *.bmp as include filter. A second possibility is to enable the "Create Statistics on File Extensions" feature in the [Options](#)^[62]. This will provide a detailed statistics for the file types in each sub-tree on the "[Extensions](#)^[45]" tab and you will be able to limit the values in the directory tree to one file type. A third possibility is to use the [Custom File Search](#)^[119] of the File Search Module of TreeSize. Our product [SpaceObServer](#) has extended and more flexible reporting features if needed.

Q: The folder "System Volume Information" in the root of my drive uses a lot of disk space. What is the purpose of this folder?

A: This folder is part of the Windows System Restore. You shouldn't delete any files in this folder manually. Its size can be reduced by changing the appropriate setting in the "System" applet of the Windows Control Panel. Windows Vista only allows to turn off the System Restore here. The space used by this service can only be reduced using the Windows command line utility `vssadmin`.

Q: Can TreeSize be installed on a cluster?

A: **Yes**, TreeSize can be installed on a cluster. It is not cluster aware, but does not need to be. If you obtain a license for each server and install TreeSize on all machines of the cluster, then you will have TreeSize available at any time on any server of the cluster. Our product [SpaceObServer](#) has more advanced cluster support.

Q: Are there any known problems when using TreeSize on a Citrix server?

A: TreeSize runs in a Citrix environment, there are currently no known problems. Please note that you need one license for each Citrix client in which TreeSize can be started.

Q: Where does TreeSize store the data shown on the "History" tab?

A: The history data can exported or imported on the "History" ribbon. This data is stored in the file named `ScanHistory.xml` which is stored in you user profile directory under `%AppData%\JAM Software\TreeSize`.

5.3 Printing / Export

Q: How can I specify the columns that should be included in the printed report / exported Excel file?

A: Under "Tools > Options > Export > Printer" you may choose the columns included in a printed report. They will also be used for [scheduled scans](#)^[145] as long as they are started under the same user account..

Q: How can I generate a list of files that belong to a certain user?

A: Please make sure that the option "Tools > [Options](#)^[62] > Scan > General > Create statistics for file owner" is activated. Scan the folder in question. Go to the "Users" tab in the right pane, right-click on a user and select "Show files of this user". The list will be compiled and can be exported in various formats.

Q: How can I export also the the file names to my Excel / HTML / text file?

A: Please go to "Tools > Options > Export", select your export type and activate the options "Include single files in export" and "Export the full directory branch" are activated. You may also consider using the custom search type of the [TreeSize File Search](#)^[108] to list all or some files of a directory branch. These lists can be exported as well, e.g. to Excel files.

Q: When I double click on a CSV file they open in MS Excel but the data is not divided into columns. Can this be changed?

A: In the Windows Control Panel, please set the list separator under "Control Panel > Regional Options > Customize" to semicolon.

5.4 File Search

Q: How can I search for files of the type XYZ?

A: Please open the TreeSize File Search via the Windows "Start" menu or the TreeSize "File Search" menu, check the drives that should be searched, activate only the [custom search](#)^[119] type and there add "*.XYZ" to the "Filter Patterns" that should be matched, then press the "Start" button. Another possibility: Set a [filter](#)^[64] in the Options dialog of the main application. Then TreeSize will only include matching files when calculating the folder sizes. The results will provide a good overview of the distribution of these file type(s) and can be exported to a text file using the context menu. Our product [SpaceObServer](#), which keeps the data of watched file system trees in an SQL database, has faster and more flexible search and report features.

Q: Is it possible for TreeSize to move files to a specified location based on last change date and retain directory structure?

A: Yes. Please open the TreeSize File Search via the Windows "Start" menu or the TreeSize "File Search" menu, check the drives that should be searched, activate only the [custom search](#)^[119] type and there adjust the date or days value. You may also use the Custom file search if you need more flexible filter options. Then hit the "Start" button. All listed files that are checked can then be moved using the "Move items". If you choose another file system folder as destination, the directory structure will be preserved when moving the files.

Q: How can I search my entire network for AVI files?

A: Please open the TreeSize File Search via the Windows "Start" menu or the TreeSize "File Search" menu, hit "Browse and add path", choose "Network". Make sure that only the Custom Search type is activated and there add the pattern *.avi and hit "Start".

Q: Is it possible to check several or all results in the File Search window at one time instead of checking them individually?

A: To check all results, click on "Check All". To check some results based on their name, use the "Check if" button. You may select multiple files using a left mouse click while holding the <Shift>- or <Ctrl>-key down. Using "Check" from the context menu checks all currently selected files. Some successive files can also be easily checked by pressing the space bar several times. The space bar checks the currently focused file and advances to the next file in the list.

Q: Which files can I safely delete?

A: Unfortunately there is no short and easy answer to this question because usually one cannot know where a file came from and what it is used for. Generally temporary files and cache files of the internet browsers can nearly always be deleted safely. Besides deleting files, the TreeSize File Search offers you to move files to a different drive or to a compressed ZIP file (preserving the file system hierarchy) which can then be archived. That way files that are still needed can be easily restored, either manually or by using the restore script that TreeSize is able to generate optionally.

Q: Does TreeSize have the capability to delete files in specified directories over a certain age and if so, can this be scheduled?

A: The TreeSize File Search can search, report and delete or move files over a certain age in using the "[Oldest Files](#)"^[108] search type or the [custom search](#)^[119] type. Check the files you want to delete (use "Check All" to check-mark all files) and use the "Move" button to move them to the Recycle Bin or to another folder.

Any saved search options can be used to automatize such tasks by creating a [scheduled TreeSize task](#)^[144], which allows you to create a scheduled task or to compile and copy the full command line with all necessary [command line options](#)^[156].

Q: How can I change XY for each file in the search results in a scheduled File Search?

A: Please start the TreeSize File Search and configure the custom file search appropriately, turn off all other search types and save your search options to an XML config file using the "File" menu. As an example we will describe

how to apply NTFS compression to all files in the search results. This is not built into TreeSize, but TreeSize can pass each search result to an executable or script, which is a very powerful and flexible feature. Please create a small Batch file `NTFSCompress.bat` containing:

```
COMPACT /C %1
```

To NTFS compress the search results, you can use a command line like this:

```
TreeSize.exe /SEARCH /MOVETO NTFSCompress.bat MySearchOptions.xml
```

This solution applies to the Professional Edition only.

Q: Is it possible to scan all our 200 workstations with TreeSize for finding e.g. who stores PST files locally on his workstation?

A: What you can do is using the [Custom Search](#)^[119] type of the TreeSize File Search. It allows to search the entire network or IPv4 address ranges for certain files, like *.pst. Simply specify * or \\192.168.123.* as path to search. TreeSize will then enumerate all available PCs in the network or that IPv4 network segment and search their drives (or more exactly: their public and hidden shares) for the files matching the search criteria.

Q: Does TreeSize support paths with more than 255 characters when searching files?

A: Yes. And Long path can be explicitly searched for using the [Custom Search](#)^[127]. Simply activate the search option "Full Path longer than X characters" with a value of 255.

Q: How do you search for files over a certain number GB and older than a certain date? I'm trying to find data to archive on my file server

A: Please open the TreeSize File Search via the Windows "Start" menu or the TreeSize "File Search" menu, check the drives that should be searched, activate the "Custom Search" type only and there adjust the search parameters on the "Date" and "Size/Attributes" tab accordingly.

Q: Does TreeSize change any of the modified / accessed / changed date & time information on files or folders when scanning?

A: No, TreeSize does not change file dates when scanning a file system branch.

Q: How do I perform a duplicate file search on multiple network drives?

A: Open the TreeSize File search using the Windows Start menu or the TreeSize Tools menu, add the network paths to the list of "Drives and Paths to Search", activate the Duplicate Search only and start the search. You may change the way TreeSize compares the files on the "Duplicate Files" tab.

Q: After deduplicating files, the Windows "Properties" dialog still shows the same size for the containing folder. Why is this?

A: When [deduplicating files](#)^[115], TreeSize replaces duplicate files by [hard links](#)^[174], after which the physical data exists only once on the hard disk. There are however X links to this data. Each of these links is shown with the size of the physical data, this is why the Windows Explorer and by default also TreeSize shows the same size for these files and the folders they are included in. If you take a look at the allocated space of the physical drive (e.g. in the [Drive List](#)^[56] in TreeSize or in the "Properties" of the drive in the Windows Explorer) you will notice the difference. To get the correct physically allocated size of a folder, you need to look at the column

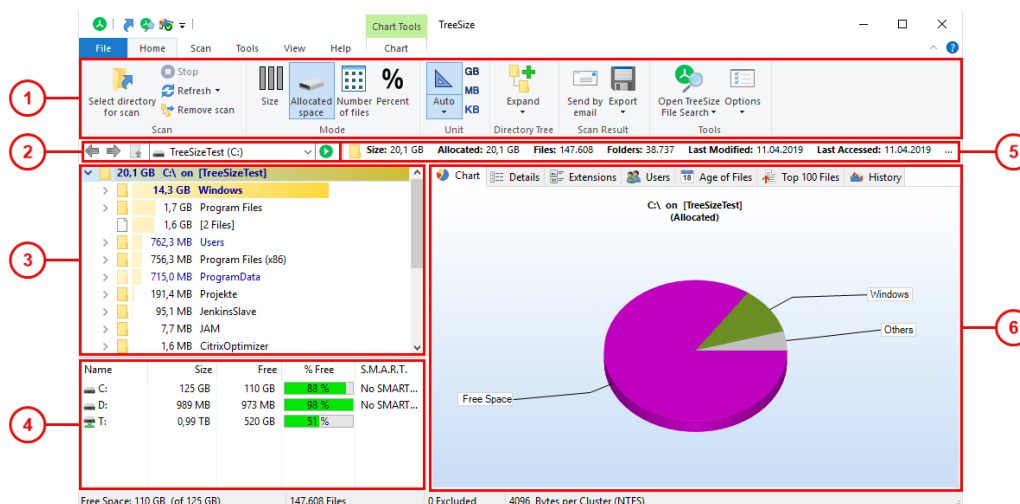
"Allocated Space". In the TreeSize [main application](#)^[6] make sure that the option "[Track NTFS alternate data streams and NTFS hardlinks](#)^[62]" is turned on in the [Options dialog](#)^[62].

Q: Does TreeSize allow to search for directories?

A: Yes. You can use the [Custom Search](#)^[119] type of the TreeSize File Search to do that. Please open the TreeSize File Search via the Windows "Start" menu or the TreeSize "File Search" menu, check the drives that should be searched, activate only the [custom search](#)^[119] type and there check-mark "Include Folders" but not "Include Files" on the tab "Size/Attributes". Press "Start", TreeSize will now search for directories only, for which you can define name patterns on the tab "Filter Patterns".

6 Using TreeSize

After the installation, TreeSize can be started using the Windows Start menu/screen or the context menu of a folder or drive. These are the important elements of the TreeSize main window:



1 The Ribbon Bar provides access to all commands of TreeSize. It is divided into logical sections such as the "[Home](#)^[22]" tab containing commonly used functions and elements, or the "[View](#)^[27]" tab enabling you to customize the appearance of TreeSize. The colored tab to the right is a context-sensitive depending on the currently active view. Use the "**Select directory for scan**" to start the scanning process for a drive or folder.

2 This section contains a drop-down list enabling you to select a drive or folder to be scanned. You can enter paths directly in the control field. Press enter or click the scan button on the right to start a scan for the entered path. TreeSize will remember recently used paths and add them to the list.

3 The [Directory Tree](#)^[31] of the scanned folder or drive provides an immediate overview of the size of each folder.

4 The [Drive List](#)^[56] provides an overview of all local and mapped network drives. Additional network drives can be added using the context menu. Double-click on a drive to start a scan in TreeSize.

5 This section will provide additional information regarding the scanned path . (e.g. its total size and the number of folders contained).

6 The view section contains several different tabs, each of them providing a . highly specialized data view of the currently selected drive or folder. As soon as a view is activated, the corresponding context tab will become active on which you will find useful commands for this view. These are the available views of TreeSize:

- The "[Chart](#)^[34]" view **visualizes folder information** either as a "[Pie Chart](#)^[36]", "[Bar Chart](#)^[38]" or as a "[Tree Map](#)^[39]".
- The "[Details](#)^[40]" view will provide you **detailed information on all files and folders** contained in the current selected item in the [Directory Tree](#)^[31]
- The "[Extensions](#)^[45]" view presents information on size grouped by file types. Thus, you'll gain an overview of the types of **files that use up most of the disk space**.
- The "[Users](#)^[47]" view shows information on size grouped by users. You will see at a glance **which user uses how much space** in which folder.
- The "[Age of Files](#)^[49]" view shows the distribution of the **age of scanned files**, based on a certain date attribute.
- The "[Top 100 Files](#)^[51]" view lists the **100 largest files** in the scanned path along with several other details.
- The "[History](#)^[53]" view shows changes in for the scanned path in a line chart.

7 The [Quick Access Toolbar](#)^[21] is a customizable shortcut to many useful . functions of TreeSize.

6.1 The Ribbon Bar

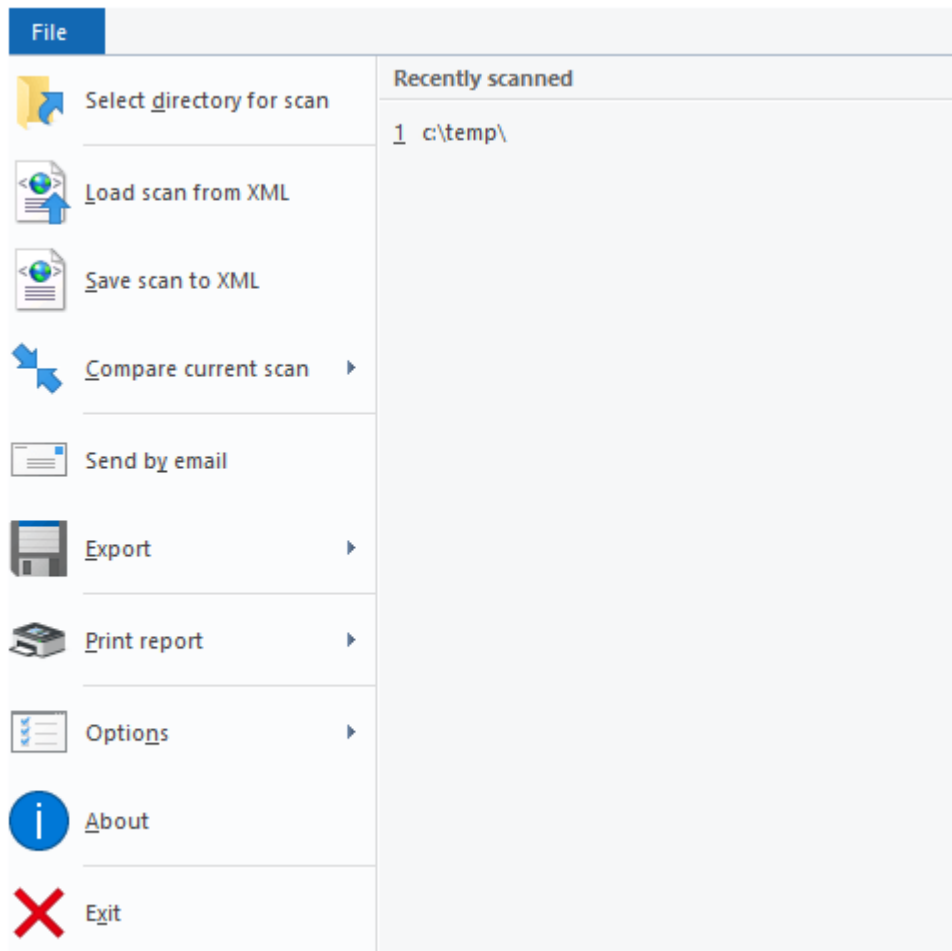
The Ribbon Bar provides access to all commands of TreeSize. It is divided into the following logical sections, called "Tabs":

- [File](#)^[18] Allows you to select folders for scanning, to load, save, compare, export, and print collected data.
- [Home](#)^[22] Contains the most commonly used actions and elements of TreeSize.
- [Scan](#)^[24] Contains all actions and elements related to the current scan.
- [Tools](#)^[26] Contains useful TreeSize and Windows-specific functions.
- [View](#)^[27] Contains all actions and elements influencing the general appearance of the application.
- [Help](#)^[28] Provides common help features, version information, and management functions for your product license.

In addition to these permanent tabs there are several so-called "context tabs" which depend on the currently [active view](#)^[34] of TreeSize. They are highlighted in different colors.

6.1.1 Application Menu

The Application Menu (or "File" menu) allows you to select folders for scanning, loading, saving, exporting, or comparing collected data. It also provides access to the application settings and allows you to exit TreeSize.



Recently Scanned List of recently scanned paths and drives. Clicking a path will start a scan of this path.

Select directory for scan Shows a dialog which lets you choose a folder for scanning. When the selection has been confirmed, TreeSize starts scanning the selected path. You can also enter a path directly into the drive combo box in the toolbar.

Load scan from XML Load a saved TreeSize scan from an XML file. That way you can view earlier results without performing a whole scan again.

Save scan to XML Save the current scan to an XML file. This file can be loaded in TreeSize again or can be used to perform a comparison at a later time. Please note that the information about single files is not saved to the XML since this would increase the size of the XML.

files too much. Only the information about folders is included in the file. If you need reporting on file level, our software [SpaceObServer](#) may be useful for you.

Compare current scan	Compare the current scan against a previously saved scan (XML file) or a Snapshot ^[57] (only supported for local NTFS drives). After comparison, folders unchanged in size will show up with a size of 0 while folders that have grown will have values greater than 0 and will be displayed in red color. Folders that became smaller compared to the loaded report will have negative values and will be displayed in green color.
Send by Email	Send the Directory Tree ^[31] (left pane) via email.
Export	Export the Directory Tree, chart or list content to a file. See chapter Export submenu ^[19] .
Print report	Print the Directory Tree, chart or list content. See chapter Print submenu ^[20] .
Options	Open the options dialog of TreeSize. The submenu also contains commands that allow you to import/export and reset the current options.
About	Show version number and contact information.
Exit	Closes TreeSize.

6.1.1.1 Export Submenu

The menu items in the export submenu allow you to export the collected scan data in several different ways. You can customize the kind of data (columns) that will be exported as well as other export options using the [options dialog](#)^[60] of TreeSize. You can also choose whether only those folders currently visible (expanded) in the [Directory Tree](#)^[31] or all folders will be exported. Please use the [Expand](#)^[25] button on the [Home](#)^[22] or [Scan](#)^[24] tab (or in the context menu of the Directory Tree) to expand and collapse or expand folders to a certain level.

Plain text	Export the Directory Tree to a tab-separated text file. To configure the behavior for text exports, go to Options -> Text ^[90] .
CSV file	Export the Directory Tree to a CSV file (comma separated values). To configure the behavior for CSV exports, go to Options -> CSV ^[87] .
Excel file	Export the Directory Tree to a Microsoft Excel file. Supported formats are the conventional .XLSX file format (introduced with Excel 2007) as well as the former used .XLS (Excel 97-2003). Paths are exported as clickable hyperlinks. This allows you to

	quickly jump to the appropriate path in the Windows Explorer. To configure the behavior for Excel exports and the charts ^[34] that should be included, go to Options -> Excel ^[82] .
HTML file	Enables you to save a report as an HTML file which can be viewed with any HTML browser later. HTML files are easier to read than text files and don't require a special application like MS Excel. The HTML file will be UTF8-encoded and thus includes Unicode characters. To configure the behavior for HTML exports and the charts ^[34] that should be included, go to Options -> HTML ^[85] . There you can also define a custom CSS stylesheet that will be used for the HTML export.
PDF file	Enables you to save a report as an PDF file which can be viewed with any PDF Viewer later. PDF files are easier to read than text files and only require a free PDF viewer, which is included in Windows 8 and later. To configure the behavior for PDF exports and the charts ^[34] that should be included, go to Options -> PDF ^[80] .
Copy to clipboard	Copy the Directory Tree to clipboard in text format.
Copy list of files	Copy a list of all files in the current folder (and its sub-folders) to the clipboard. You can paste this list to your favorite spreadsheet or word processor. The settings for the text export ^[90] in the options dialog determine which columns will be included in the list.
Customize	Opens the options dialog enabling you to customize the output columns for the different export formats.
Set title	Allows you to set a title for the currently selected scan which will be used when the folder data is printed or exported. The default title includes the path of the scanned folder and the volume name of the drive the folder resides in. The use of environment variables is allowed.

6.1.1.2 Print Submenu

TreeSize offers a wide variety of flexible printing functions. You may, for example, print the content of the Directory Tree, the contents of a selected folder or any available chart ([Charts](#)^[34] view, [History](#)^[53] view, etc.).

The following commands are available in the "Printer" submenu:

Quick print	Print a report for the current scan on the default printer without print dialog or preview.
Quick print right pane	Print the chart ^[34] or list shown the right pane of the window on the default printer without preview.

Print report	Print report for the currently selected scan without preview.
Print right pane	Print the chart ^[34] or list currently shown the right pane of the window.
Print with preview	Shows a print preview for the report of the currently selected scan.
Print report for all	Print a report for all scans currently listed in the Directory Tree (left pane).
Set title	Allows you to set a title for the currently selected scan which will be used when the folder data is printed or exported. The default title includes the path of the scanned folder and the volume name of the drive where the folder resides in. The use of environment variables is allowed.
Page setup	Change page layout settings.
Print setup	Change printer settings.
Customize report	Customize exported columns, included charts ^[34] , etc.

6.1.2 Quick Access Toolbar

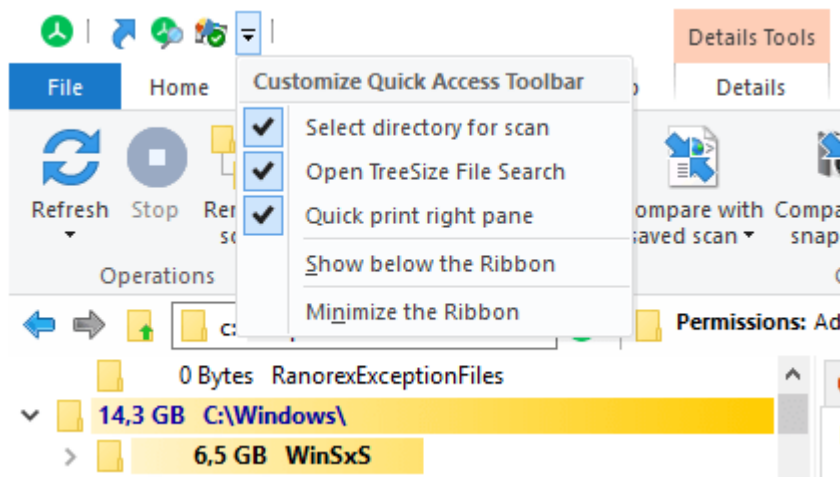
The Quick Access Toolbar is a customizable toolbar containing a set of commands that are independent of the currently displayed tab. You can move the Quick Access Toolbar to one of the two possible locations, and you can add buttons representing commands to the Quick Access Toolbar.

Move the Quick Access Toolbar

The Quick Access Toolbar can be located in one of two places:

- Upper-left corner, next to the TreeSize icon.
- Below the Ribbon bar.

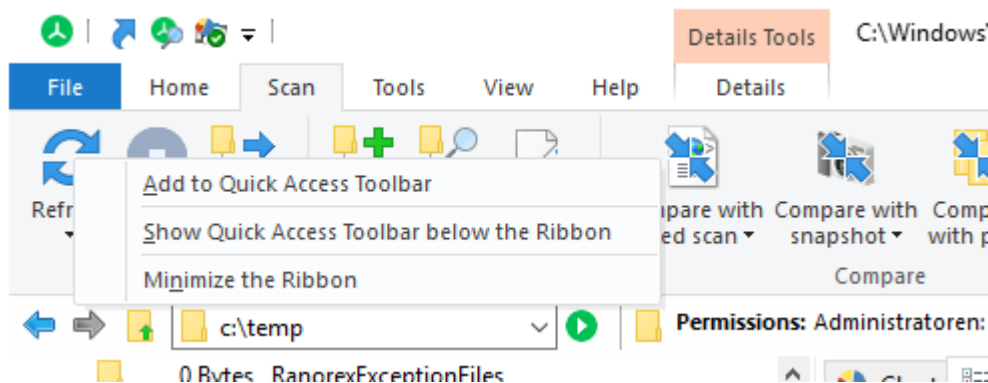
To switch the Quick Access Toolbar between those positions, click the small drop-down arrow and select "Show below the Ribbon" respectively "Show above the Ribbon".



Add a command to the Quick Access Toolbar

You can add any command displayed in TreeSize to the Quick Access Toolbar.

1. On the Ribbon, click on the appropriate tab or group to display the command that you want to add to the Quick Access Toolbar.
2. Right-click the command, and then click "Add to Quick Access Toolbar" on the shortcut menu.

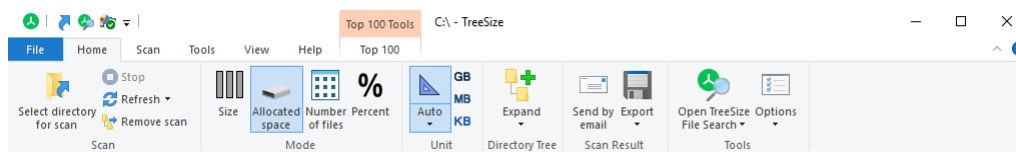


Note

- You cannot split the Quick Access Toolbar to multiple lines.

6.1.3 Home Tab

The ribbon tab **Home** contains the most commonly used actions and elements of TreeSize.

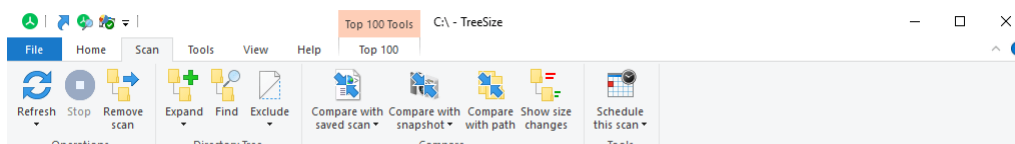


Select directory for scan	Opens a dialog enabling you to select a folder for scanning. TreeSize will start scanning the selected path once the selection has been confirmed. You can also enter a path directly into the drive combo box in the toolbar.
Stop	Stops the currently selected scan. This will abort the current scan process but not remove it from the Directory Tree ³¹ .
Refresh	Refreshes the currently selected scan. The Refresh button also offers a drop-down menu providing access to the "Refresh all" and the "Automatic updates" buttons. Refresh all will trigger a full refresh for all scans of TreeSize. With Automatic updates enabled, TreeSize keeps track of the Windows change notifications and updates the size information as well as several other information automatically. It will also update the size of a folder if it gets listed on the details sheet. If you don't want the size information to change after the scan has finished, you should turn off "Automatic Updates". This option can be enabled or disabled for individual scans.
Remove scan	Removes the currently selected scan from the TreeSize window.
Size	Shows the size of files and folders.
Allocated space	Shows occupied disk space on the hard disk.
Number of files	Shows the number of files in the selected folders.
Percent	Shows how much percent of the parent folder each folder occupies.
Optical media	Shows how much storage space the files and folders would occupy on an optical medium like a CD or DVD.
Auto	If this option is activated, TreeSize will automatically select the most appropriate size unit. Other units are available via the drop-down element (small arrow).
GB	Show size values in gigabyte (GB).
MB	Show size values in megabyte (MB).

- KB** Show size values in kilobyte (KB).
- Expand** Using the "Expand" button, you can expand or collapse the [Directory Tree](#)^[31] to a certain directory level. You can also use this menu to trigger a "Full expand" so that you will see any folder that is available in the current scan. More information on the "Expand" button can be found [here](#)^[33].
- Send by email** Sends the [Directory Tree](#)^[31] via email. This will create an email containing the contents of the directory tree using the current email settings. Emails can either be send using a **MAPI** client like Microsoft Outlook or via **SMTP** (recommended). [Email settings](#)^[92] can be configured in the options dialog of TreeSize.
- Export** This button provides several different export options such as "Excel", "Plain text", or "HTML file". You can also copy the directory tree or the contents of the "Details" view to the **clipboard**. The drop-down menu enables you to **customize any export type**.
- Open TreeSize File Search** Start the **TreeSize File Search** with all available types of file search (largest files, oldest files, etc.) for the currently selected branch. For more information on the TreeSize File Search, see chapter [Using TreeSize File Search](#)^[97].
- Start as administrator** Restart TreeSize with administrator privileges.
Please note: This button is available only if TreeSize was not started with administrator privileges.
- Options** Opens the options dialog for TreeSize. The drop-down button also provides access to the menu allowing **export/import and reset** of the application settings.

6.1.4 Scan Tab

The ribbon tab **Scan** contains all actions and elements related to the current scan.



- Refresh** Refreshes the currently selected scan. The Refresh button also offers a drop-down menu providing access to the "Refresh all" and the "Automatic updates"

buttons. **Refresh all** will trigger a full refresh for all scans of TreeSize. With **Automatic updates** enabled, TreeSize keeps track of the Windows change notifications and updates the size information as well as several other information automatically. It will also update the size of a folder if it gets listed on the details sheet. If you don't want the size information to change after the scan has finished, you should turn off "Automatic Updates". This option can be enabled or disabled for individual scans.

Stop

Stops the currently selected scan. When a scan is stopped, TreeSize will abort the current scan process but not remove it from the [Directory Tree](#)^[31].

Remove scan

Removes the currently selected scan from the TreeSize window.

Expand

Using the "Expand" button, you can expand or collapse the [Directory Tree](#)^[31] to a certain directory level. You can also use this menu to trigger a "Full expand" so that you will see any folder that is available in the current scan. You can also use this menu to show only folders exceeding a certain size value.

Find

Searches for a certain folder in the [Directory Tree](#)^[31].

Compare with saved scan

Loads a saved scan from an XML file and compares it with the current scan. The differences in size will be displayed as positive and negative values in the user interface.

Compare with snapshot

Selects a [Snapshot](#)^[57] of a scanned drive to compare it with the current data. The differences in size will be displayed as positive and negative values in the user interface.

Compare with path

In rare cases it can be useful to compare the current scan with another path, e.g. in case that the other path is a copy or a backup of the currently displayed path. After choosing the other path using a directory picker dialog, the differences in size will be displayed as positive and negative values in the user interface.

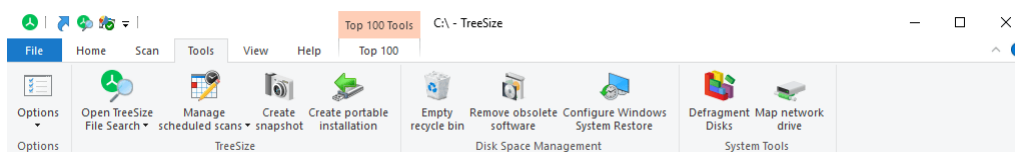
Show size changes

Show size changes instead of current values in the Directory Tree. This view option can be toggled if the current scan was compared with an XML report or snapshot.

Schedule this scan	Creates a scheduled Windows task ^[145] for the currently active scan. This is supported in the Professional edition only.
Compress item	Compresses this file or folder using NTFS compression.
Decompress item	Turns off NTFS compression for this file or folder.

6.1.5 Tools Tab

On the **Tools** tab, you will find several useful TreeSize- and Windows-specific functions.



Options	Opens the options dialog for TreeSize. The drop-down button also provides access to the menu items facilitating the export/import and reset of the application settings.
Open TreeSize File Search	Starts the TreeSize File Search with all available types of file search (largest files, oldest files, etc.) for the currently selected branch. For more information about the TreeSize File Search, please refer to chapter Using TreeSize File Search ^[97] .
Manage scheduled scans	Shows all scheduled tasks of TreeSize. Tasks can be customized here.
Create snapshot	Creates a new Snapshot ^[57] for this system. Snapshots can be used at a later time to analyze size development by comparing the data of the snapshot with that of a recent scan.
Create portable installation	Creates an installation of the Professional edition as a portable version, e.g. on a USB Stick. All of the settings will be saved to the specified installation directory.
Empty recycle bin	Deletes all items in the recycle bin to free up disk space.
Remove obsolete software	Opens the Windows Control Panel applet to uninstall software.
Configure Windows	Define how much space the Windows System Restore feature can use on your local hard drive.

System
Restore

Defragment
disks

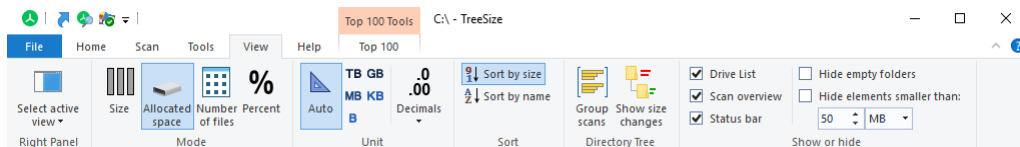
Open the Windows Disk Defragmenter.

Map
network
drive

Opens the Windows "Map Network Drive" dialog.

6.1.6 View Tab

The ribbon tab **View** contains all actions and elements influencing the general appearance of the application.



Select
active
View

Selects the view that is shown in the right panel of the application

Size

Shows the size of files and folders.

Allocated
space

Shows occupied disk space on the hard disk, aka "size on disk".

Number
of files

Show the number of files in folders.

Percent

Show how much percent of the parent folder each folder occupies.

Optical
Media

Show how much storage space the files and folders would occupy on an optical medium like a CD or DVD.

Auto

If this option is activated, TreeSize will automatically select the most appropriate size unit.

TB

Show size values in terabyte (TB).

GB

Show size values in gigabyte (GB).

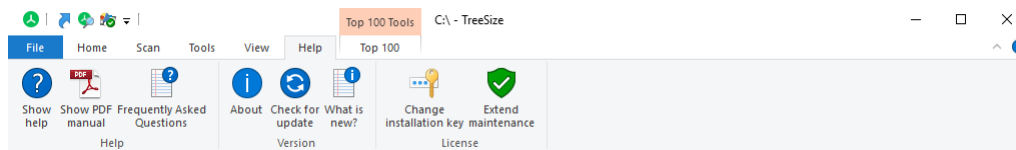
MB

Show size values in megabyte (MB).

KB	Show size values in kilobyte (KB).
B	Show size values in byte (B).
Decimals	Sets the number of decimals shown in displayed values.
Sort by size	Sort items by size (descending order).
Sort by name	Sort items in alphabetical order.
No sorting	Do not sort items. This can be useful when scanning large folders drives because folders don't permanently change their position.
Group scans	Groups all scans in the Directory Tree ^[31] to receive the total results for all scans. See also " Group scans in the Directory Tree ^[33] ".
Show size changes	Shows size changes instead of current values in the Directory Tree ^[31] . This view option can only be toggled if the current scan was compared with an XML report or snapshot. See also " Size comparison ^[58] ".
Drive list	Show or hide Drive List ^[56] .
Scan overview	Show or hide scan overview toolbar (provides information such as total size and number of files and folders for the currently selected scan). Right clicking on the overview allows you to define whether it should wrap around or truncate the shown information in case it does not fit.
Status bar	Show or hide status bar (provides information on active scan filters and or errors that occurred during scan process).
Hide empty folders	If activated, all folders with zero files will be hidden. This is particularly useful if there a lot of such folders because a filter is applied.
Hide elements smaller than	If activated elements smaller than the specified size will be hidden.

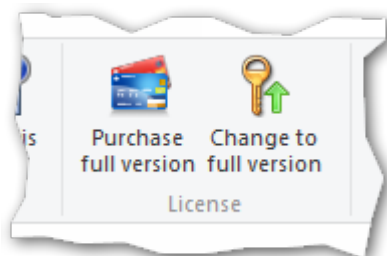
6.1.7 Help Tab

The ribbon tab **Help** provides common help features, version information, and management functions for your product license.



Show help	Open the product manual of TreeSize.
Show PDF manual	Open the product manual as PDF (optimized for printing).
Frequently Asked Questions	Shows the Frequently Asked Questions (FAQ).
About	Shows version number and contact information.
Check for update	Checks if a newer version of this software is available.
What is new?	Shows recent changes.
Change installation key	Changes the installation key of the software.
Extend maintenance	Extends the maintenance period. Updates and support are free within the selected maintenance period.

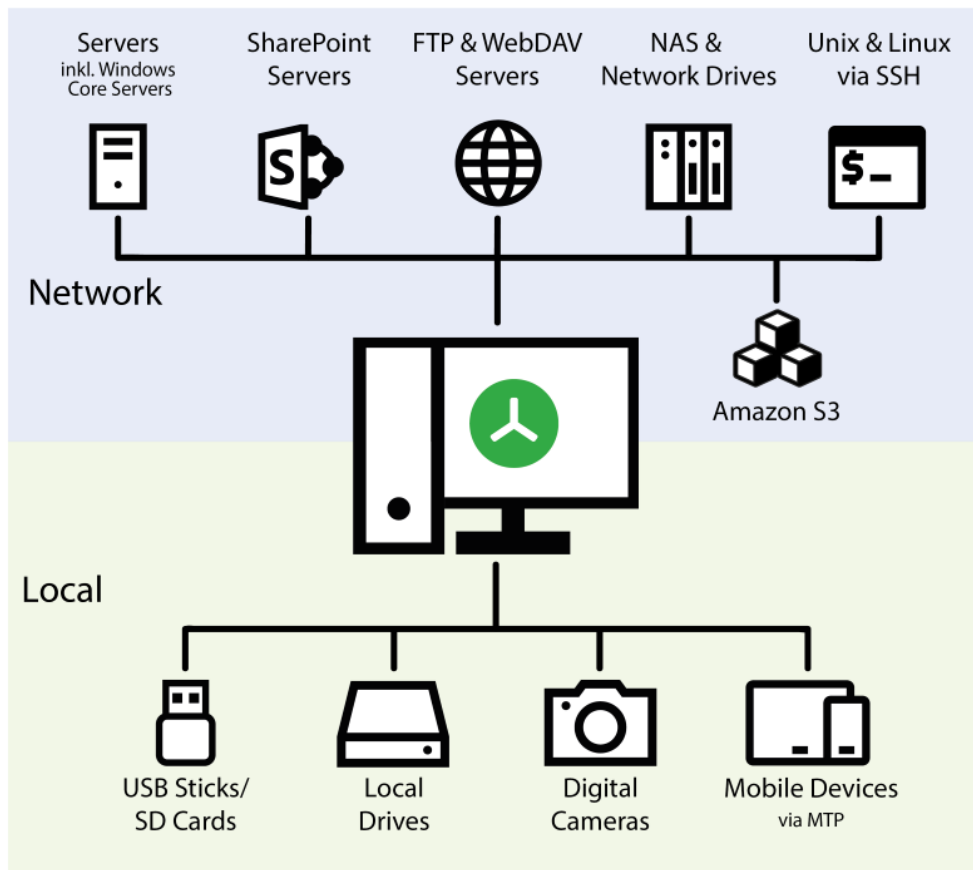
Please note: For the trial version of TreeSize, the Ribbon group "License" contains different controls:



Purchase full version	Navigates to the JAM Software website and shows a list of all available license models.
Change to full version...	Helps you switch to the full version after purchasing the software.

6.2 Scan Targets

Originally TreeSize was designed to analyze file system paths. The current version enables users to scan targets not accessible via a file system path. Among them is every folder that appears in the left pane of the Windows Explorer. In this chapter we will describe all targets that can be scanned using TreeSize:



Local File System Paths

To scan a file system path, enter the path into the drive drop-down box on top of the [directory tree](#)^[31] or use the button "Select directory for scan" on the ribbon tab "[Home](#)"^[22]. You can also double-click on the drive in the TreeSize [drive list](#)^[56] on the bottom left corner of the window to start a scan.

Remote File System Paths

If a remote path is mapped to a drive letter, scan it just like a local drive (as described above). Additionally TreeSize supports UNC paths like "`\\servername\share`", which can be entered in the drop-down box on top of the [directory tree](#)^[31]. You can also select the remote path using the button "Select directory for scan" on the ribbon tab "[Home](#)"^[22] and browse to the path in the "Network" folder. To search your entire network, choose the "Network" folder here or use the path `*`.

UNC paths can also be added to the [drive list](#)^[56] using the right-click menu.

Mobile Devices and Smartphones

Mobile devices and smartphones can be scanned with TreeSize if they support the [MTP protocol](#). Those devices are typically listed under "This PC" in the Windows Explorer and in the dialog which appears when using the button "Select directory for scan" on the ribbon "[Home](#)"^[22]. TreeSize also support entering paths to mobile devices like this: "*This PC\Galaxy Tab A*" in the drop-down box on top of the [directory tree](#)"^[31].

FTP Server

If the FTP server is listed under "This PC" in the Windows Explorer, you can use the button "Select directory for scan" on the ribbon tab "[Home](#)"^[22] to select this FTP server for scanning. You may also enter the FTP server address into the drop-down box on top of the directory tree using this syntax: "*ftp://username@servername.com/path*".

WebDAV and SharePoint Server

If the WebDAV or SharePoint server is listed under "This PC" in the Windows Explorer, you can use the button "Select directory for scan" on the ribbon "[Home](#)"^[22] to select this server for scanning. You can also enter the HTTP(S) server address into the dropdown box on top of the directory tree using this syntax: "*https://servername.com/path*".

Linux/Unix Server

With TreeSize you can scan Linux or Unix server, even though they are not integrated into your Windows storage environment, using the SSH network protocol. You can enter address of server shares to scan via SSH into the dropdown box on top of the directory tree using this syntax: "*ssh://servername/share*".

Please note: TreeSize will request login information (user name and password) for the SSH connection. Alternatively, you can obtain these directly in the address: "*ssh://user:password@servername/share*"

Amazon S3 Cloud Storage

You can scan Amazon S3 cloud storage with TreeSize. To scan your entire S3 storage, simply type `s3://` in the dropdown box on the top left and press enter. To scan a certain bucket use: `s3://Bucketname/`

TreeSize will ask for an access token and the corresponding secret access token with the option to save it for future use. You may also supply this information as part of the URL: `s3://Token:SecretToken@Bucketname/`

In the column "Description" the storage class of a file (e.g. reduced redundancy oder standard) will be shown.

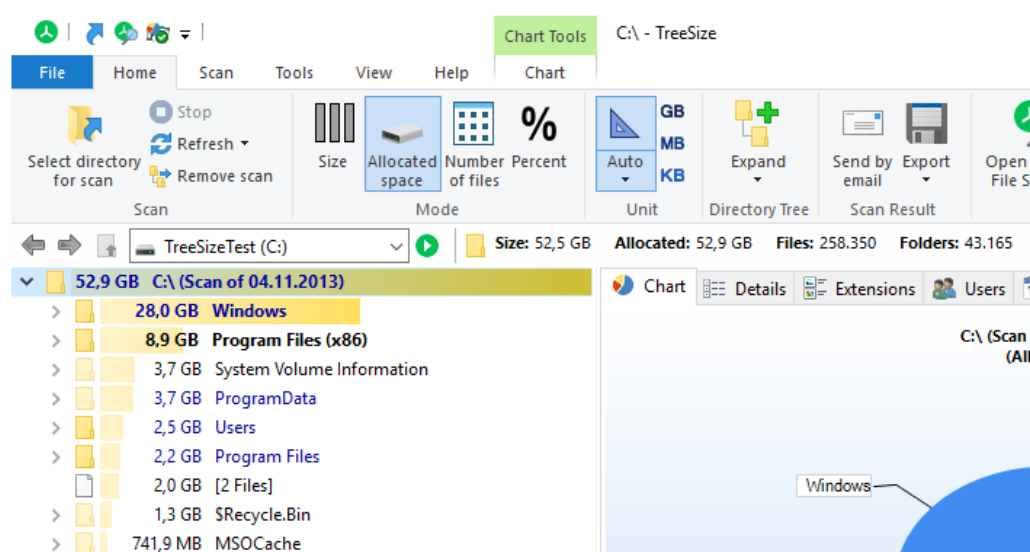
6.3 The Directory Tree

The **Directory Tree** of TreeSize is a powerful tool for **visualizing the size** of files and folders. The gradient bar in the background serves as a size indicator, providing a quick and **intuitive overview**: you will see at a glance which

folders occupy the most space on your disk. The Directory Tree can be browsed just like a folder tree in the Windows Explorer.

Contents

- [Notes](#)^[32]
- [Expand or collapse the Directory Tree](#)^[33]
- [Group scans in the Directory Tree](#)^[33]

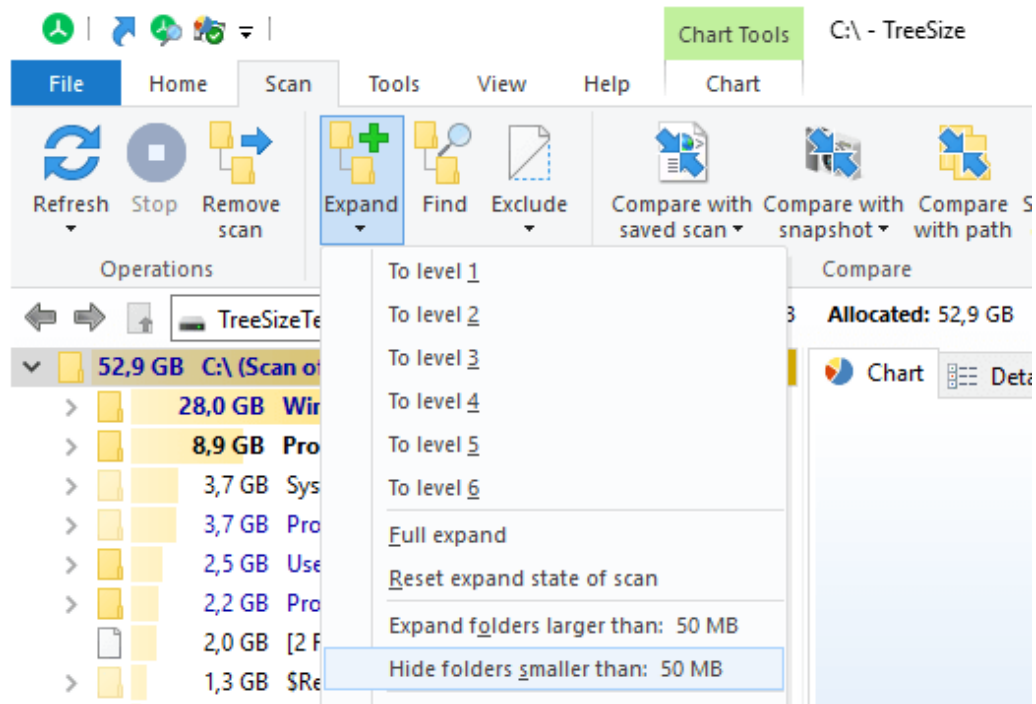


Notes

- If you place your mouse cursor on a folder, you'll be shown a tool tip with detailed information if the [corresponding option](#)^[72] is active.
- The Directory Tree supports an incremental search. To jump to a certain folder, simply type the initial characters of its name after clicking anywhere in the Directory Tree. The Search will then select the first matching folder.
- The [Find](#)^[25] dialog ([Scan](#)^[24] tab) provides a simple search function enabling you to search for certain folders in the Directory Tree.
- When you right-click on a folder or file in the tree to the left, TreeSize will display the Explorer context menu. Additionally, you will find the TreeSize submenu providing various additional options.
- Very large folders are marked in bold text. The threshold can be configured in the options dialog ([Options > View > General](#)^[66]).
- The color for the gradient bar can be configured in the options dialog ([Options > View > Directory Tree](#)^[70]).

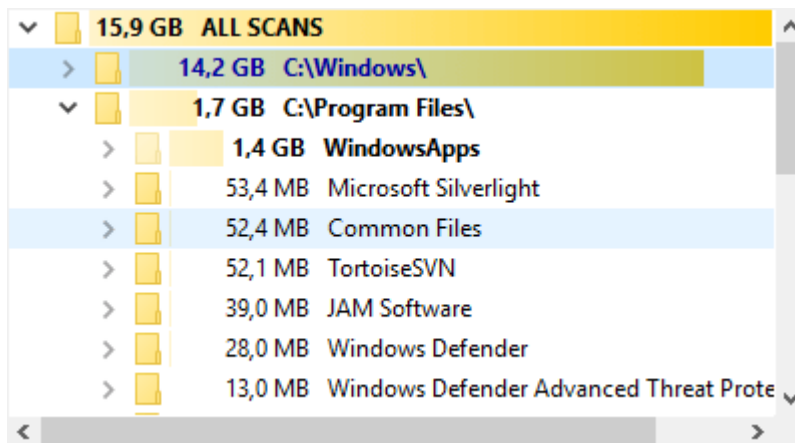
Expand or collapse the Directory Tree

Using the **Expand submenu** (accessible via tabs [Home](#)^[22] and [Scan](#)^[62]) you can **expand/collapse and hide** certain folders in the tree, based on a certain directory level or an user-defined size value. For example, you can hide any file and folder occupying less than 500 MB (see screenshot below). This way, the **most relevant elements** will be shown in the tree while **unimportant information is hidden**.



Group scans in the Directory Tree

With the "[Group scans](#)^[28]" button (available on the [View](#)^[27] tab or via the context menu), you can merge multiple scans into a single "virtual root". The virtual root shows a summary of all scans that are part of this group. This way you will gain total sizes and values for arbitrary scans.



6.4 The TreeSize Views

The following viewing options are available in TreeSize:

- [Chart](#)^[34] Visualizes folder information in several different types of charts.
- [Details](#)^[40] Provides an Explorer-like list of files and folders contained in the currently selected item in the [Directory Tree](#)^[31].
- [Extensions](#)^[45] Shows information on size grouped by file types.
- [Users](#)^[47] Shows information on size grouped by users.
- [Age of Files](#)^[49] Shows the distribution of the age of scanned files, based on a certain date attribute.
- [Top 100 Files](#)^[51] Lists the 100 biggest files in the scanned branch in detailed view.
- [History](#)^[53] Visualizes the size development of the selected root folder.

6.4.1 Chart

TreeSize is able to **visualize folder information** in several different types of charts. The information is based on the currently active [view mode](#)^[27] of TreeSize. There are three basic types of charts, namely:

- [Pie Chart](#)^[36]
- [Bar Chart](#)^[38]
- [Tree Map](#)^[39]

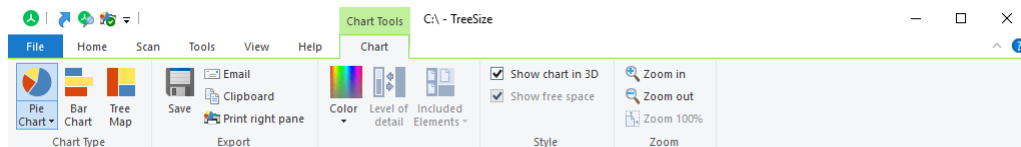
Context tab: Chart

Please note: a context tab will be activated when the Chart view is selected. It allows you to manipulate the charts in several ways, for example zooming,

turning on or off the grid lines, switching between 2D and 3D mode, changing colors, etc. Using the tab, you can also copy the current chart to the clipboard or save it as a file.

More options to individualize the Charts are available with the [Options Dialog](#)⁷⁵.

Some elements are available exclusively for certain types of charts (e.g. "Level of Details" for "Tree Map" chart only).



For all directory charts the following commands are commonly available:

Pie Chart	Switches to pie chart view.
Bar Chart	Switches to bar chart view.
Tree Map	Switches to hierarchical chart view.
Save	Saves the current chart as a graphic file.
Email	Export the current chart and send it via email. You can configure your email settings in options dialog.
Clipboard	Copies the current chart to the clipboard (can be pasted in other applications).
Print chart	Prints the current chart.
Color	Use the color picker to choose a color for the chart below: select a color, then click on the part of the pie the color should be applied to.
Show chart in 3D	View chart in 3D or 2D.
Zoom in	Zooms in on the chart.
Zoom out	Zooms out of the chart.
Zoom 100%	Resets zoom to 100%.

Dependent on the displayed chart type, there are additional options available:

For pie charts:

Show Free Space Show the free space of a drive as additional slice.

For bar charts:

Show Grid Show or hide grid lines for this chart.

For the Tree Map chart:

Level of detail Change the detail level of the tree map.

Show Free Space Show the free space of a drive as a separate tile.

Included Elements The Tree Map allows you to specify which elements should be included with the chart. The size of each tile represents the size of the according element (usually the summarized size of the contained files), just as for folders.

Activating more than one type of elements to be included, a hierarchical structure will be implied: Each file belongs to an extension, each extension belongs to a file type group, and each group belongs to a folder.

The legend of the chart will adapt to the selected elements.

There are several options available:

Show single files Include a separate tile for each file.

Show extensions Include a separate tile for each extension contained within a folder.

Show file type groups Include a separate tile for each [file type group](#)^[72] contained within a folder.

Context Menu

Right-clicking on any chart shows a popup menu offering additional features, such as opening the corresponding item in the Windows Explorer.

Pie Chart

The Pie Chart shows the relative portions of each subfolder of the currently selected item in the [Directory Tree](#)^[31].

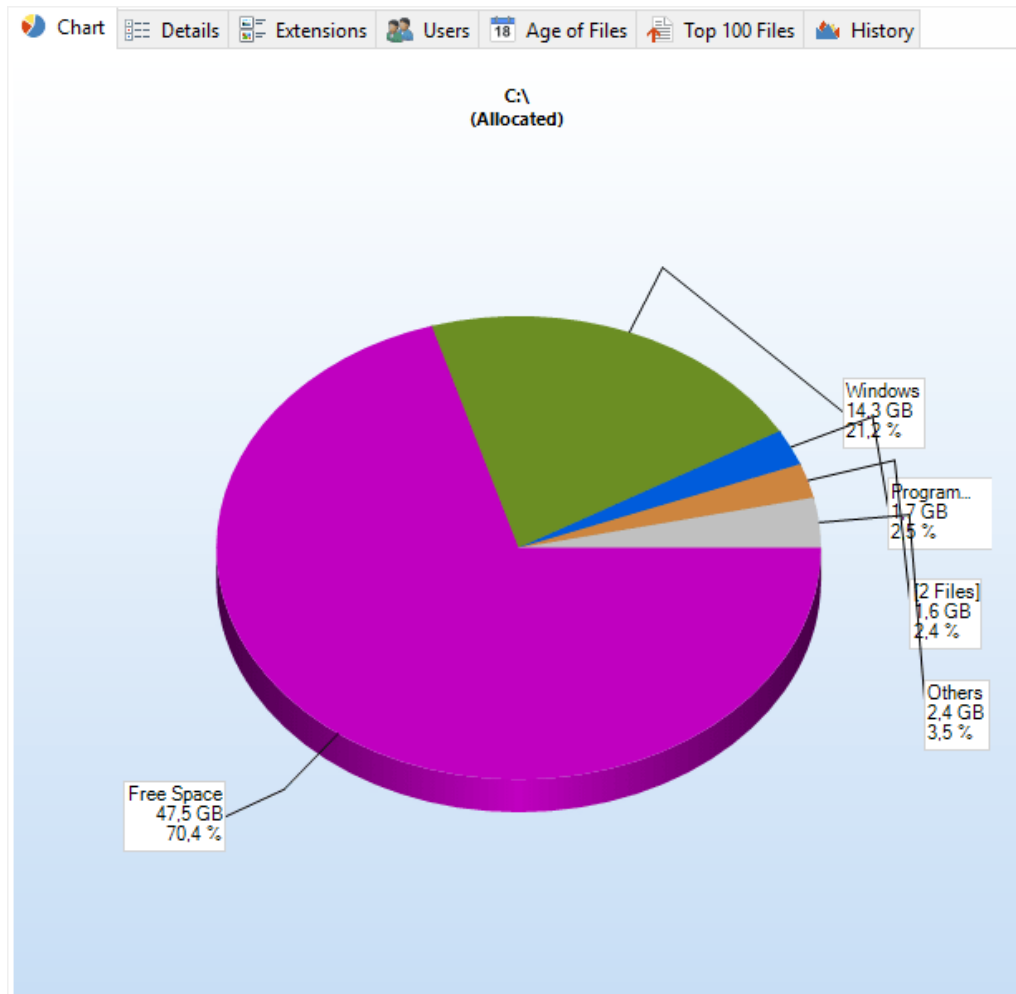
The diagram contains the name of each folder, its size (or allocated space, or number of files; for more information please see [view modes](#)^[27]), and its percentage value. Small folders may be summarized in a slice named "Other".

If a root of any drive is displayed in a pie chart and you have switched to the "Allocated Space" mode, the free space of this drive will also be displayed as one slice of the pie. This behaviour can be switched on or off in the options menu. The pie chart shows the free space as one slice among the others and calculates the percentage appropriately (relatively to the others), so the percent

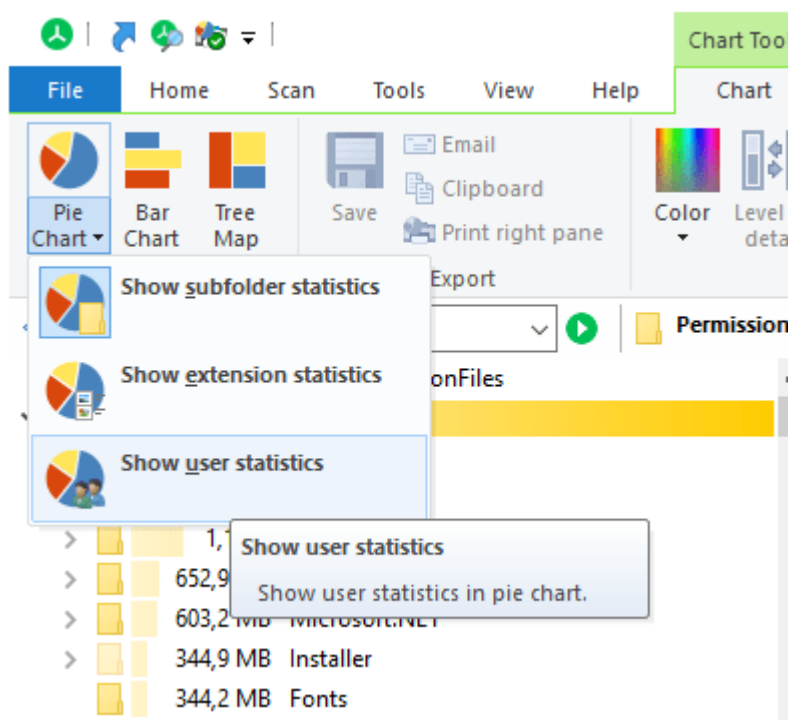
value might differ from the "% Free" value of the drive if TreeSize didn't see all files. An [FAQ entry](#)^[10] deals with the possible reasons.

Hovering over a slice will show detailed information about the corresponding folder, double clicking will change into the selected folder.

Double-clicking on a slice will show the pie chart view for the selected folder. In case the clicked slice represents a file, it would be executed. Right click a slice in order to perform file operations like delete, copy, paste, properties etc. To manage several folders at once hold the shift key while selecting the desired segments in chart.

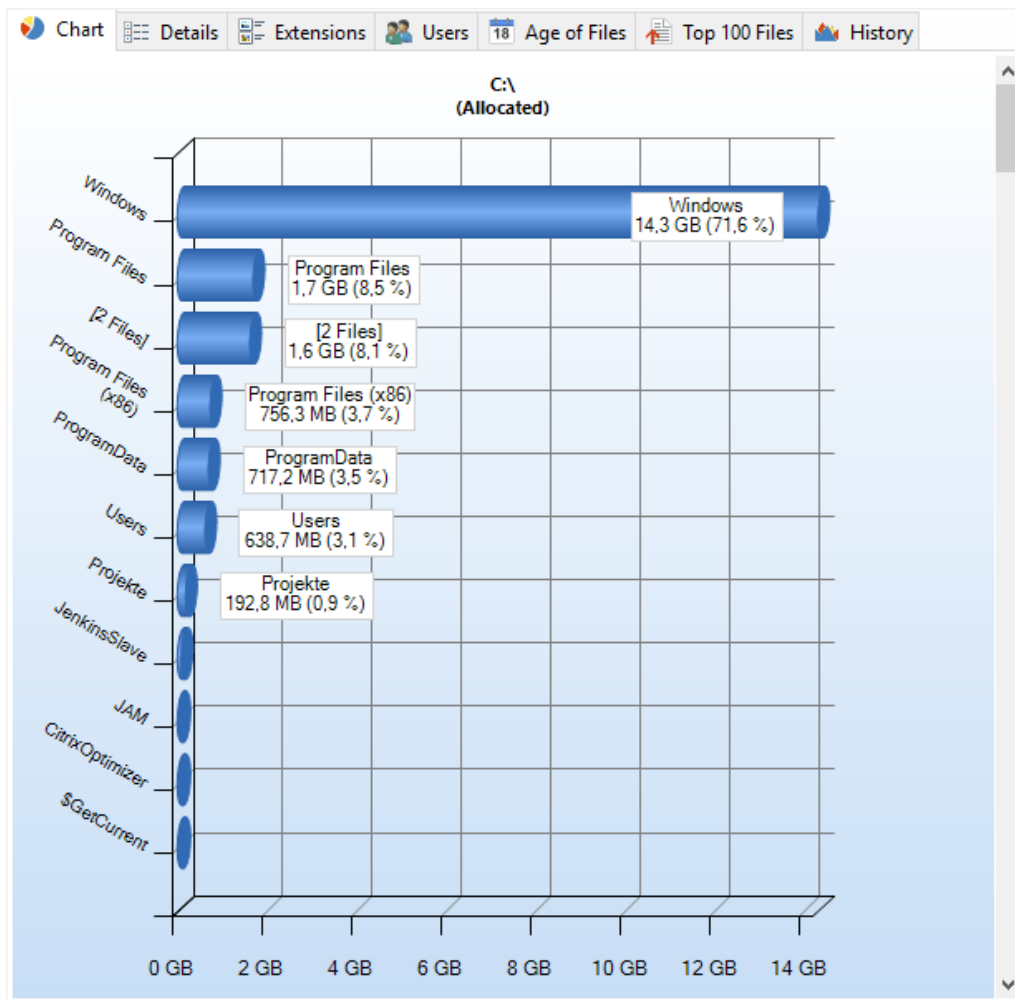


Please note that the Pie Chart not only visualizes the sizes of each subfolder of the currently selected item in the Directory Tree, but also the distribution of **file extensions** and even the file and directory owners (**user statistics**). To change the type of the Pie Chart, please click on the drop-down arrow right beside the caption of the Ribbon button (see image below).



Bar Chart

The Bar Chart visualizes folder sizes in form of horizontal bars. Grid lines in the background of the chart allow for easy determination of folder sizes and comparison of each folder in relation to other folders on the same directory level. As with the pie chart, hovering over a bar will call up more detailed information about the corresponding folder. Double-clicking on a bar will show the bar chart view for the selected folder.



Tree Map

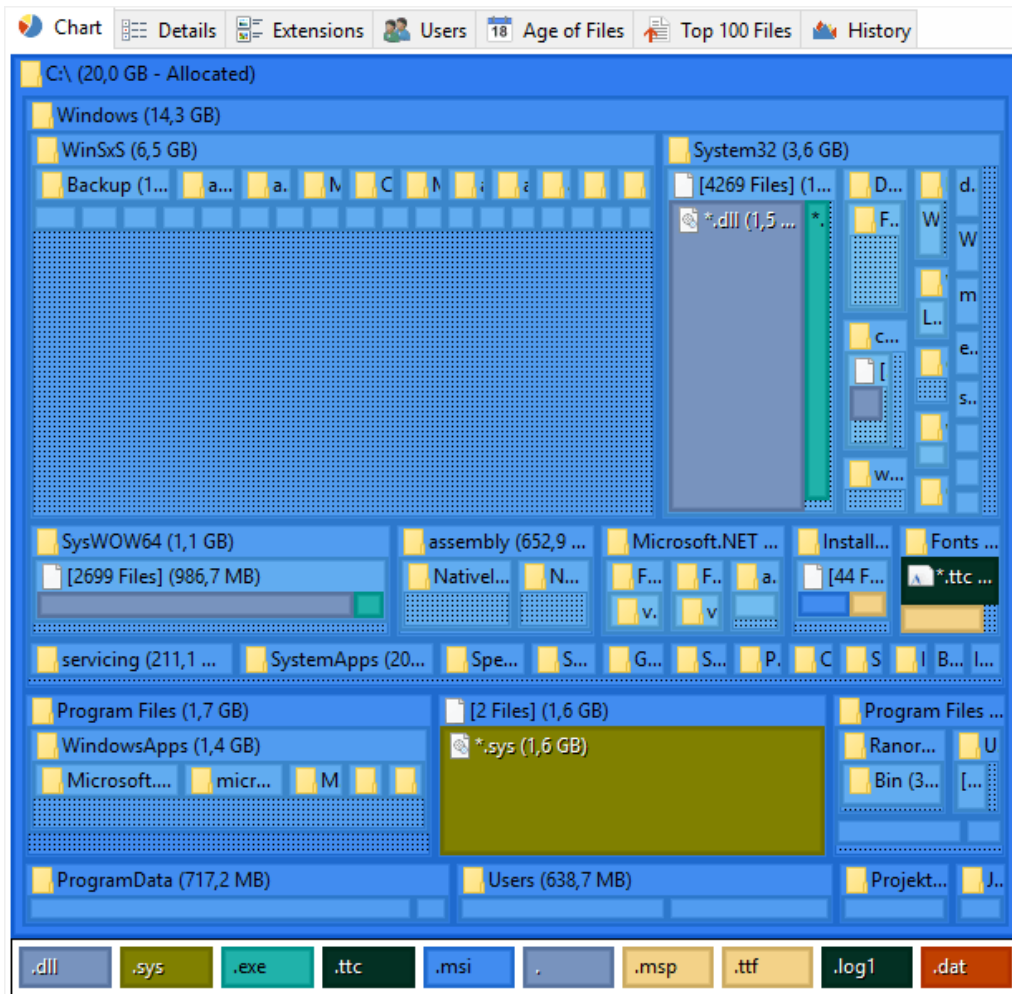
The Tree Map is a hierarchical chart that is able to visualize the sizes of each subfolder (not only direct child folders) of a selected directory branch.

Each folder is shown as a rectangle. The area of the rectangle represents the size of the corresponding folder. The rectangles of subfolders are located inside the rectangle of their parent folder. If a folder has no subfolders and the [file extensions](#)^[45] statistics was activated during the scan, the file types are now shown as subitems.

The color of the rectangle face indicates the directory level. The colors range from a darker blue (top level directories) to a lighter blue (directories with a deep file system level). These colors can be adjusted using the [color picker](#)^[35] in the context tab. The context menu of the Tree Map also allows you to apply a predefined color scheme. The shown rectangles must have a minimum size to be displayed. You can customize this minimum value using the [Level of Detail](#)^[36] track bar in the context tab. If this value is small, the chart might look very complex and confusing.

If you place the mouse cursor over the chart, you will see a tooltip containing information about the directory the cursor hovers over. Double-clicking on one

of the rectangles will navigate to the corresponding directory in the [Directory Tree](#)^[31]. Drag and drop operations are supported in the tree map.



6.4.2 Details

The **Details** provides an Explorer-like list of files and folders that are contained in the current selected item in the [Directory Tree](#)^[31].

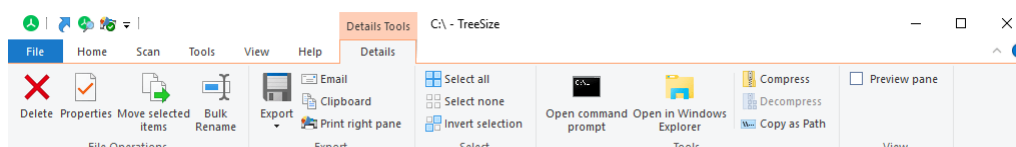
Chart Details Extensions Users Age of Files Top 100 Files History						
Name	Size	Allocated	Files	Folders	% of Parent ...	Last Modified
Windows	14,4 GB	14,3 GB	125.7...	32.320	71,6 %	11.04.2019
Program Files	1,7 GB	1,7 GB	14.260	1.968	8,5 %	11.04.2019
pagefile.sys	1,4 GB	1,4 GB	1	0	6,9 %	11.04.2019
Program Files (x86)	752,5 MB	756,3 MB	2.190	359	3,7 %	09.04.2019
ProgramData	771,7 MB	717,2 MB	1.368	546	3,5 %	11.04.2019
Users	636,7 MB	638,7 MB	3.047	3.144	3,1 %	11.04.2019
swapfile.sys	256,0 MB	256,0 MB	1	0	1,2 %	11.04.2019
Projekte	191,7 MB	192,8 MB	598	242	0,9 %	11.04.2019
JenkinsSlave	94,8 MB	95,1 MB	146	18	0,5 %	11.04.2019
JAM	7,7 MB	7,7 MB	19	4	0,0 %	09.04.2019
CitrixOptimizer	1,6 MB	1,6 MB	41	16	0,0 %	25.03.2019
\$GetCurrent	177,2 KB	184,0 KB	8	2	0,0 %	22.02.2019
logs	55,2 KB	56,0 KB	1	0	0,0 %	09.04.2019
System Volume Info...	20,1 KB	20,0 KB	5	0	0,0 %	22.02.2019
\$Recycle.Bin	516 Bytes	0 Bytes	4	4	0,0 %	09.04.2019
Dokumente und Ein...	0 Bytes	0 Bytes	0	0	0,0 %	27.04.2018
PerfLogs	0 Bytes	0 Bytes	0	0	0,0 %	15.09.2018
Programme	0 Bytes	0 Bytes	0	0	0,0 %	27.04.2018
Recovery	0 Bytes	0 Bytes	0	1	0,0 %	22.02.2019
temp	0 Bytes	0 Bytes	0	1	0,0 %	11.04.2019

More Columns

Detailed information on each file or folder can be shown by selecting the desired **attribute** in the column list, available by **right-clicking the header** of the list or via the [Details page](#)^[68] in the options dialog of TreeSize. Individual file types, users or Age of files intervals can be added as columns as well. To do so, right click on the extensions, user, or interval and select "Add column ... to Details". These columns will be exported as well, if in the [Options](#)^[82] the checkbox "Use same columns as in Details view" is checked.

Context tab: Details

Like every view in TreeSize, the Details view comes with a Ribbon tab that is activated when the the list is clicked. The Ribbon tab provides commonly used list functions such as select operations or export features.



The following commands are available on the "Details" tab:

Delete	Deletes the selected items. Hold the "Shift" key to remove the item(s) from the disk permanently (Please note: You cannot recover files that have been removed permanently!).
Properties	Shows the properties for the selected item.
Move selected items	Opens a dialog for the execution of file operations. The dialog allows to move the selected items to another location. It also provides functionalities to archive, copy, or delete them, using a variety of additional options, such as the creation of a log file of the operation.
Rename selected items	Opens a dialog that allows to rename multiple files ¹³² at the same time.
Export	Exports the contents of the "Details" view to a file. If two or more items are selected, only the selected items will be exported. Available file formats are "Text Files (.txt)", "HTML Files (.htm)", "Rich Text Format (.rtf)", "Microsoft Excel (.xlsx)", and "Comma Separated Values (.csv)".
Email	Sends the content of the "Details" view via email.
Clipboard	Exports the contents of the "Details" view to the clipboard. If two or more items are selected, only the selected items will be exported.
Print pane right	Prints the selected items of the "Details" list.
Select all	Selects all items in the list.
Select none	Unselects the list items.
Invert selection	Inverts the selection.
Open command prompt	Opens command prompt at the current directory of the "Details" view.
Open Windows Explorer in	Opens Windows Explorer and shows the parent folder of the currently selected items in the "Details" view.
Compress	Compresses this file or folder using NTFS compression.
Decompress	Turns off NTFS compression for this file or folder.
Copy path	Copies the path of the selected items to the clipboard.

Preview pane Enables or disables the preview pane, which shows the content of the selected file in the "Details" list.

Context Menu on the Details view

The list on the Details view shows the Windows Explorer context menu when you right-click on an item. An additional submenu labeled TreeSize is included which shows all information that is available about the selected item including the columns that are currently not activated. This submenu may also be used to activate or deactivate columns (for a description of available columns, see [here](#))^[43].

6.4.2.1 Available Columns

These are the available columns that can be configured individually for the [Details](#)^[40] view and any export type (Excel, HTML, etc.) using the [Options](#)^[60] dialog of TreeSize.

Column name	Description
Name	The name of the file or folder.
Full Path	The full path, including the object's name.
Size	The size of the object.
Allocated	The space that the object currently occupies on disk (see also: Wasted Space ^[175] and NTFS Compression ^[172]).
Files	The number of files in a directory branch.
Folders	The number of sub-folders in a directory branch.
Growth	The absolute size difference (e.g. in MB) of this element. Only available if the scan was compared with a saved scan or snapshot. Please refer to the topic " Directory Tree ^[31] > Compare scans ^[58] " for more information. The value in this column depends on the selected view mode and unit (see tabs Home ^[22] and View ^[27]).
% Growth	The relative size difference of this element
% of Parent	The amount of space in percent that a folder or file occupies relative to its parent folder.
Last Modified	The last modification date of the object. TreeSize calculates the last modified and last access date more precisely than the Windows Explorer, because it takes all files in all sub-folders into account. So the values shown in the Windows Explorer may differ. This behavior can be changed in the options ^[60] dialog, under "Scan > General > Folder date calculation" (Expert mode).
Last Access	The last access date of the object.

Compr.	The size in percent by which an object has been compressed using the built in compression of the file system (see also: Notes on NTFS ^[172]).
Owner	The name of the user that is assigned as owner of the folder or file in the filesystem.
Optical size	media The amount of space that an object would occupy on an optical medium such as a CD or DVD with ISO file system.
Current Date	The current date. This column can be useful if you want to process the collected data, e.g. in a database.
Attributes	The file attributes Readonly (R), Hidden (H), System (S), Directory (D), Archive (A), Compressed (C), Sparse (Q since Windows 10, P on older Windows versions), Temporary (T), Offline (O), Reparse Point (L) Encrypted (E), Pinned (P - only available on Windows 10 or later), Unpinned (U), Recall on data access (M), and Alternate Data Streams (Z).
Type	The file type, e.g. "Text file".
Dir Level	The level of an object in the file system.
Dir (Relative)	Level The level of an object in the file system in relation to the path that was used as starting point for the scan.
Creation Date	The date at which the object has been created.
Containing Path	The full path to the current object, not containing the object's name.
Avg. File Size	The average size of a file in a folder.
Permissions	<p>The access permissions of the object in the UNIX-like format: Username1: +/-R +/-W +/-X Username2: ... where "+" means the right is granted and "-" means that the right is denied. "R" stands for read access and "W" for right access. For files "X" means the right to execute, for directories the right to list the directory content.</p> <p>TreeSize maps the actual permissions to a very compact presentation: Multiple access control elements for one user are merged to one, and most special permission are not displayed.</p> <p>Please note: <i>You want to get notified if the permissions of certain important folders change? This can be done using our monitoring tool "Server Sentinel". The file system sensor allows you to monitor specific file system events, send automatic notifications, and react to them accordingly.</i></p>
Inherited Permissions	These are the permissions inherited from the parent directories.
Own Permissions	These are the own permissions defined specifically for this file system object.

File Version	The version number that is included in EXE, DLL OCX and similar binary files.
Author	This column shows the author information that is extracted from the meta data of the file, taken from MS Office and compatible files.
Last Save Date	This column shows the date on which the file was saved the last time, taken from MS Office and compatible files. This information is extracted from the meta data of the file.
Hardlinks	The number of hardlinks ^[174] to a file. Empty in case of folders.
Error	In case a folders could not be scanned, this column will contain the message of the error that occurred.
Full User Name	Shows the full user name of the owner of that file or folder.
Link Target	Shows the target path of a link.
MD5 Checksum	Shows a string representation of the MD5 checksum for this file's content.
SHA256 Checksum	Shows a string representation of the SHA256 checksum for this file's content.
Extension	The extension of the file, e.g. ".txt" for a text file.
Path Length	Shows the number of characters included in the full path of this file or folder.
Alternate Streams	Shows the size hold by " Alternate Data Streams " ^[173] for this file (not available for directories).
Space Free	Shows the amount of space that is available on the current drive.
Description	For folders and shares this column shows the comment associated with them. For office files and pictures their embedded title is shown. In case non of this data is available, but the folder's or file's name is an SID (like in the "\$Recycle.Bin" folder), this SID is resolved to a username in this column.

More Columns:

In addition to the predefined columns that are mentioned above, TreeSize supports all columns that can be selected in Windows Explorer. The selection dialog provides a large number of additional meta data, such as the number of pages in an office document, the width and height of image files, or the artist for MP3 files.

The TreeSize [File Search](#)^[121] allows to search for files that contain any arbitrary value of the available meta data.

6.4.3 Extensions

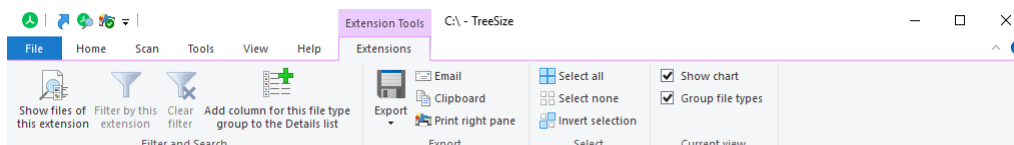
The **Extensions** view shows information on size grouped by file types, thus granting an overview of the types of files that use up most of the disk space.

Statistics on file extensions can be activated and deactivated in the [Options](#) ⁶²⁾ dialog.

Name	Size	Alloc...	Type
> Program Files	12,2 GB	12,2 GB	Program Files, Libraries and other comp
> System Files	3,7 GB	3,8 GB	System Files
> Miscellaneous Files	2,3 GB	2,2 GB	Unknown file types
> Data Files	777,4 MB	725,9 MB	Files containing data of various kinds, no
> Container Files	254,1 MB	255,0 MB	Compressed Archives and disk images
▼ Graphic Files	149,7 MB	175,6 MB	Files containing pictures, images or mou
.png	35,6 MB	59,1 MB	PNG image
.gif	44,3 MB	44,5 MB	GIF image
.jpg	38,3 MB	38,6 MB	JPEG image
.cur	16,0 MB	17,2 MB	Cursor
.ico	6,2 MB	6,5 MB	Icon
.animated	6,4 MB	6,4 MB	Animated Cursor
.bmp	1,2 MB	1,3 MB	Bitmap image
.svg	593,3 KB	840,0 KB	SVG Document
.raw	665,8 KB	712,0 KB	RAW File
.tif	373,9 KB	376,0 KB	TIF File
.dds	256,1 KB	260,0 KB	DDS Image
> Software Development Files	138,2 MB	146,0 MB	Source and project files of software dev
> Text Files	201,8 MB	106,1 MB	Plain text files, log files
> Office Files and Documents	103,6 MB	104,1 MB	Documents and files of office programs
> Temporary and Backup Files	85,4 MB	85,4 MB	Temporary files and backup copies cont
> Video Files	81,5 MB	81,8 MB	Files containing videos or animations
> Database Files	55,9 MB	56,4 MB	Files containing the data of client and se

Context tab: Extensions

Use the Extensions tab in order to select specific information for viewing and sorting the data. In addition to these filtering options, the tab also provides commands to export the list contents.



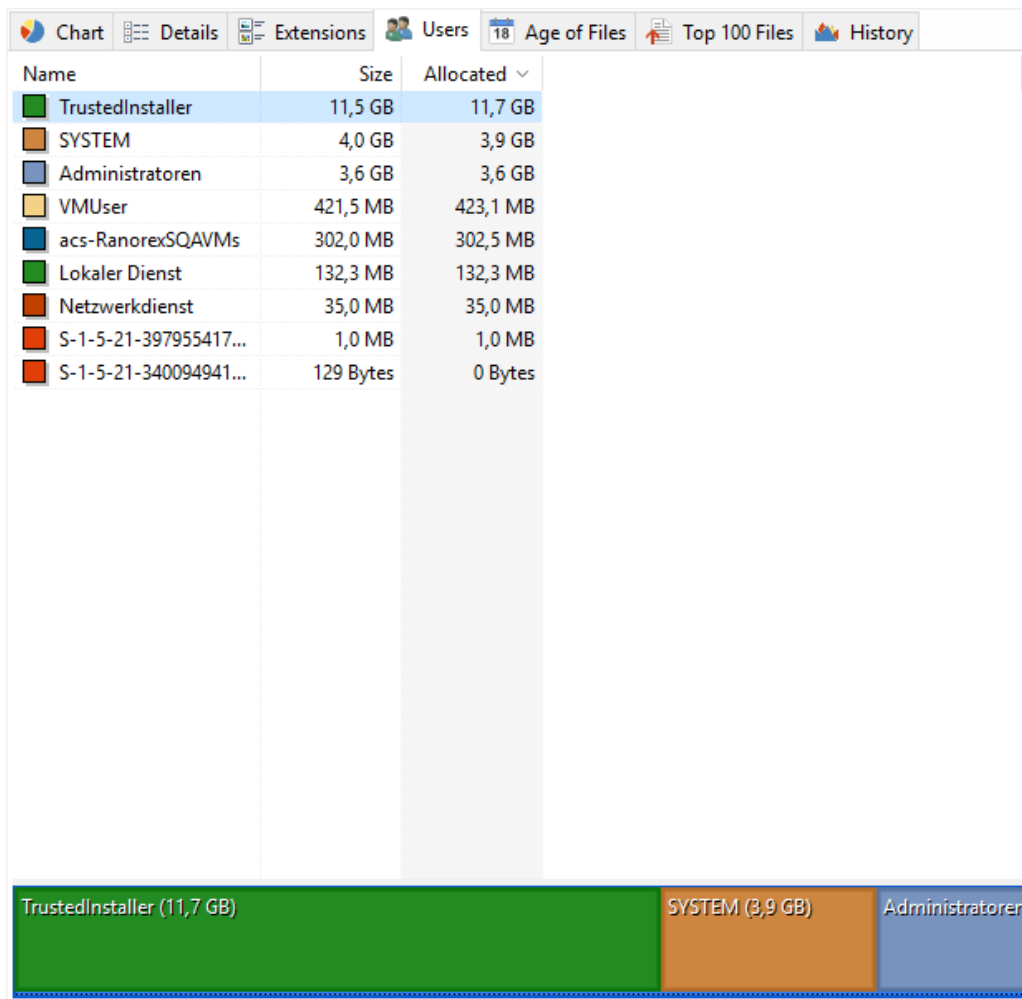
The following commands are available on the "Extensions" tab:

- Show files of this extension** Show a list of all files of the selected file type.
- Filter by this extension** Show only files with the selected file extension.

Clear filter	Remove the filter from the tree and show size information for all file types.
Add column for this file type group to the Details list	Adds a new column to the Details list, which shows how many files of the selected extensions exist within the current directory.
Export	Save the contents of this list to a file. If multiple items are selected, only the selected items will be saved. Available file formats are "Text Files (.txt)", "HTML Files (.html)", "Rich Text Format (.rtf)", "Microsoft Excel (.xlsx)", and "Comma Separated Values (.csv)".
Email	Send the content of the "Extensions" view via email.
Clipboard	Copy the content of this list to the clipboard. If multiple items are selected, only the selected items will be copied.
Print right pane	Print the contents of this list.
Select all	Select all items in the list.
Select none	Unselect the list items.
Invert selection	Invert the selection.
Show chart	Turn on or off a chart that shows the distribution of file extensions.
Group file types	Group similar file types in one group (e.g. "Audio Files", "Video Files", or "System Files"). You can configure the file groups in the Options dialog (See: " Options > View > File Groups ^[72] ").

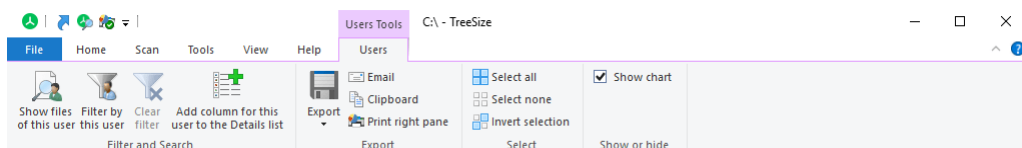
6.4.4 Users

The **Users** view shows information on size grouped by users. At a glance you can see which user uses how much space in which folder. User statistics may be enabled/disabled in the options dialog ([Options > Scan > General](#)^[62]).



Context tab: Users

Use the "Users" tab in order to select specific information for viewing sorting the data. In addition to these filtering options, the tab also provides commands to export the list contents.



The following commands are available on the "Users" tab:

- Show files of this user** Show a list of all files that are owned by the selected user(s).
- Limit to this user** Show only the files owned by the selected user.
- Clear filter** Remove the user filter and show the complete file and folder information of the currently selected branch.

Add column for this user to the Details list	Adds a new column to the Details list, which shows how many files of the selected user exist within the current directory.
Export	Save the contents of this list to a file. If multiple items are selected, only the selected items will be saved.
Email	Send the content of the "Users" view via email.
Clipboard	Copy the content of this list to the clipboard. If multiple items are selected, only the selected items will be copied.
Print right pane	Print the contents of this list.
Select all	Select all items in the list.
Select none	Unselect the list items.
Invert selection	Invert the selection.
Show chart	Turn on or off a chart that shows the distribution of file ownership.

Additional columns

By right-clicking on the column header you can enable the following additional columns:

Full User Name	The full name of the user, queried from Windows or Active Directory.
User Comment	The user comment from Active Directory.
Quota Usage	The usage queried from Windows quota management. To see values in the quota columns, you must run TreeSize as administrator and quota must be enabled on the local drive that you were scanning.
Quota Limit	The size limit that is set for the user in the Windows quota manager.

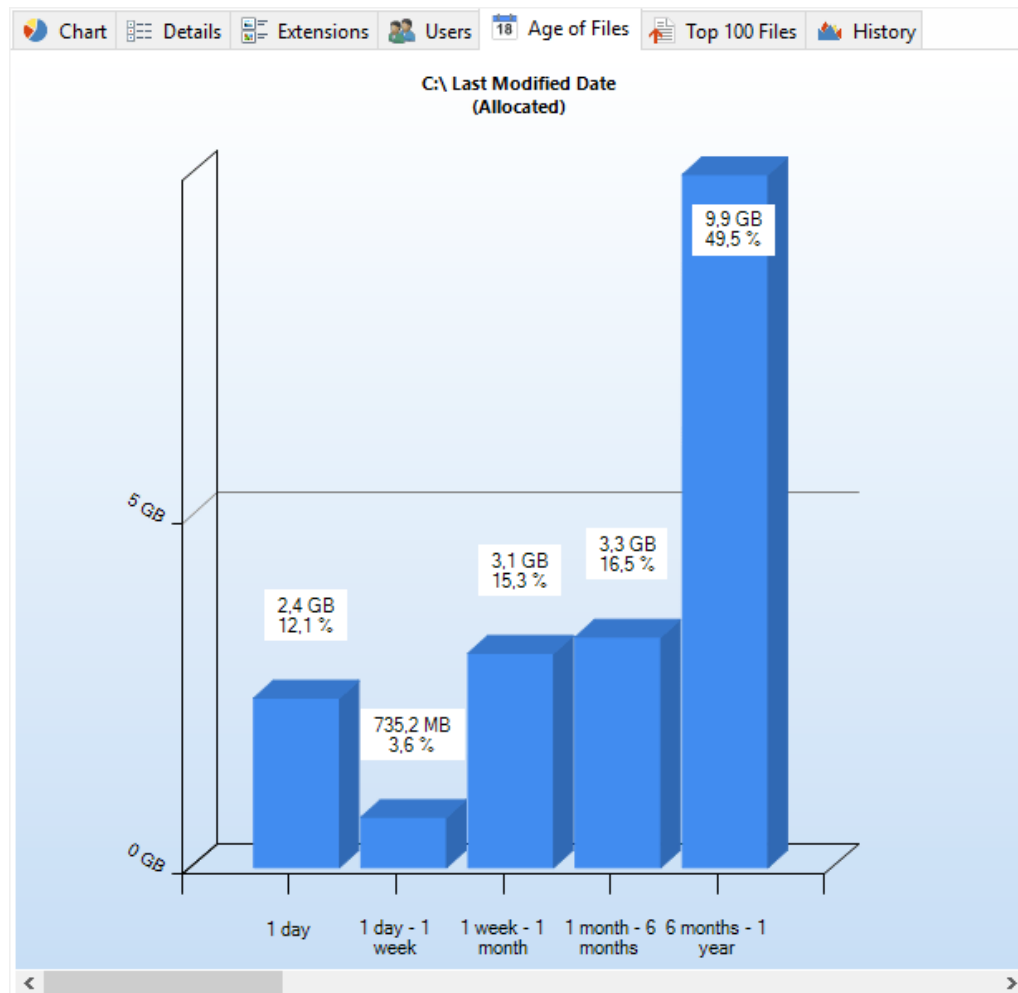
6.4.5 Age of Files

The **Ages of Files** view shows the distribution of the age of scanned files, based on one of the following date attributes:

- Last Access Date

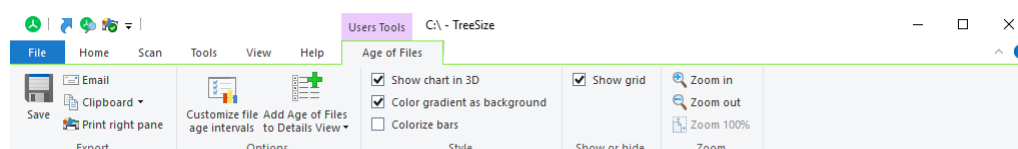
- Last Change Date
- Creation Date

Values for the specified period do not include the other, younger periods.



Context tab: Age of Files

The Ribbon tab for the "Age of Files" view offers export features equal to the Charts tab and enables you to [customize the intervals](#)^[74]. The boundaries of the intervals are always rounded to full days, i.e. to 00:00 a.m.



The following commands are available on the "Age of Files" tab:

Save Save the current chart as graphic file.

Email	Export the current chart and send it via email. You can configure your email settings in options dialog.
Clipboard	Copy the current chart to the clipboard, to paste it in other applications.
Print right pane	Print the current chart.
Customize file age intervals	Customize file age intervals (requires a scan refresh).
Add Age of Files to Details View	Adds a new column to the Details list, which shows how many files of the selected file age exist within the current directory.
Show chart in 3D	View chart in 3D or 2D.
Color gradient as background	Toggle the gradient in the background of the chart.
Colorize bars	Uses different colors for each of the displayed intervals.
Show grid	Show or hide grid lines for this chart.
Zoom in	Zoom in on the chart
Zoom out	Zoom out on the chart
Zoom 100%	Reset zoom to 100%

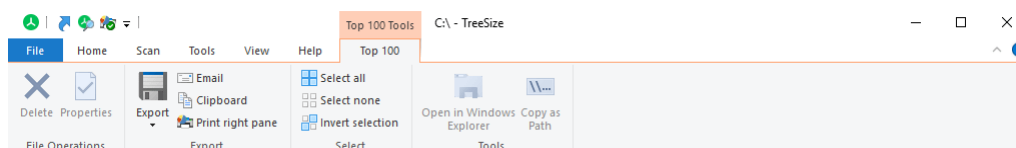
6.4.6 Top 100 Files

The **Top 100 Files** view lists the 100 largest files in the scanned branch. Similar to the [Details](#)^[40] view, you can configure the information shown here using the column header of the list. Please note that files of the system directory "System Volume Information" and the "Recycle Bin" will not be listed in this view. In the [Options](#)^[60] dialog you may adjust the number of files shown in the list and whether they will be chosen based on their plain file size or the space they actually allocate on the disk.

Name	Containing Path	Size	Allocated	Last Modified
15b2f.msi	C:\Windows\Installer\	122,8 MB	122,8 MB	13.02.2019
BootCKCL.etl	C:\Windows\System32\WDL\...	100,0 MB	100,0 MB	11.04.2019
EtwRTDefenderApiL...	C:\Windows\System32\LogFi...	99,0 MB	99,2 MB	11.04.2019
mpcache-B38B09F8...	C:\ProgramData\Microsoft\...	87,7 MB	87,7 MB	09.04.2019
MRT-KB890830.exe	C:\Windows\System32\	135,1 MB	72,6 MB	09.05.2018
SOFTWARE	C:\Windows\System32\config\	71,5 MB	71,5 MB	11.04.2019
MSORES.DLL	C:\Program Files (x86)\Com...	69,2 MB	69,2 MB	17.01.2012
MRT.exe	C:\Windows\System32\	121,5 MB	65,1 MB	25.03.2019
Microsoft.Photos.dll	C:\Program Files\WindowsA...	63,4 MB	63,4 MB	09.05.2018
rt.jar	C:\JenkinsSlave\jre\lib\	60,7 MB	60,7 MB	13.12.2016
0444bd05858d259e...	C:\Windows\WinSxS\Manifes...	56,6 MB	56,6 MB	02.04.2019
4920c.msp	C:\Windows\Installer\	50,9 MB	50,9 MB	05.11.2018
mpasbase.vdm	C:\ProgramData\Microsoft\...	44,5 MB	44,5 MB	25.03.2019
mpasbase.vdm	C:\ProgramData\Microsoft\...	44,5 MB	44,5 MB	25.03.2019
WebCacheV01.dat	C:\Users\VMUser\AppData\L...	43,0 MB	43,0 MB	09.04.2019
mpavdlta.vdm	C:\ProgramData\Microsoft\...	41,2 MB	41,2 MB	09.04.2019
32663391-FD5D-487...	C:\Program Files\WindowsA...	39,6 MB	39,6 MB	27.04.2018
COMPONENTS	C:\Windows\System32\config\	38,0 MB	38,0 MB	09.04.2019
cd008f4246e873ceab...	C:\Projekte\TreeSize\svn\pri...	37,6 MB	37,6 MB	11.04.2019
Saved_Scan.xml	C:\Projekte\TreeSize\Screens...	37,6 MB	37,6 MB	11.04.2019
Saved_Scan.xml	C:\Projekte\TreeSize\bin\Deb...	37,6 MB	37,6 MB	11.04.2019
mpavbase.vdm	C:\ProgramData\Microsoft\...	36,1 MB	36,1 MB	25.03.2019
mpavbase.vdm	C:\ProgramData\Microsoft\...	36,1 MB	36,1 MB	25.03.2019
mingliub.ttc	C:\Windows\WinSxS\amd64_...	35,1 MB	35,1 MB	15.09.2018
mingliub.ttc	C:\Windows\Fonts\	35,1 MB	35,1 MB	15.09.2018
I1031.ngr	C:\Windows\WinSxS\amd64_...	34,8 MB	34,8 MB	08.08.2018
I1031.ngr	C:\Windows\Speech\Engine...	34,8 MB	34,8 MB	08.08.2018

Context tab: Top 100

The Ribbon tab for the "Top 100 Files" list provides several file-related operations as well as common export features.



The following commands are available on the "Top 100" tab:

- Delete** Delete all selected files.
- Properties** Show the properties for the currently selected file.
- Export** Save the contents of this list to a file. If multiple items are selected, only the selected items will be saved.
- Email** Send the content of the "Top 100" view via email.

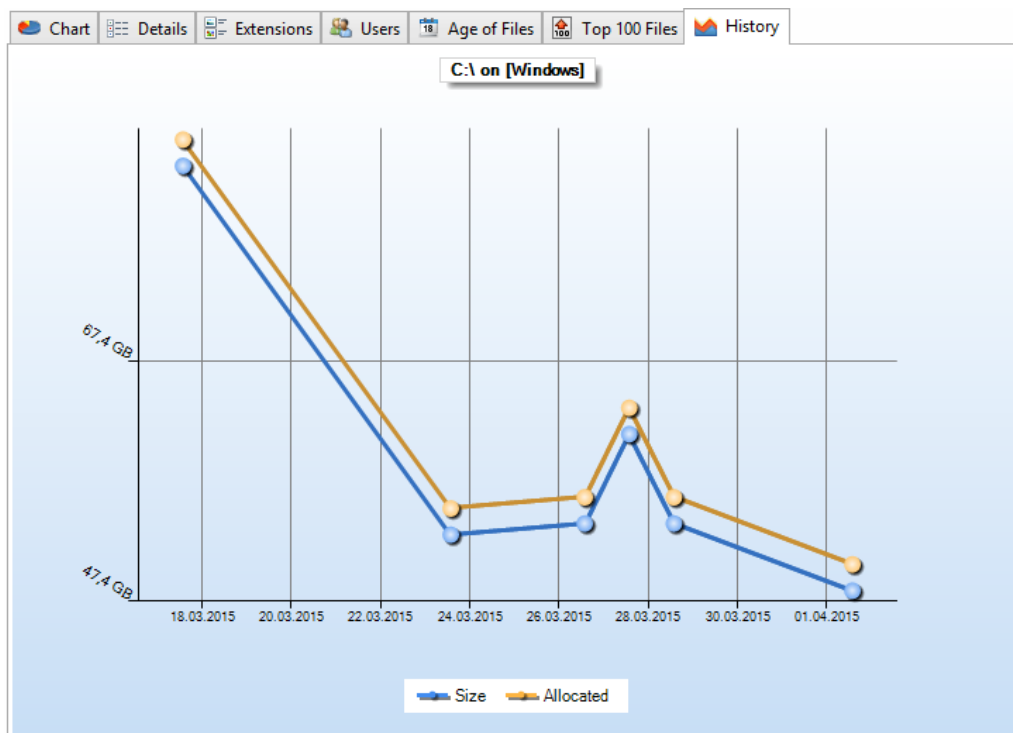
Clipboard	Copy the content of this list to the clipboard. Copy the content of this list to the clipboard. If multiple items are selected, only the selected items will be copied.
Print right pane	Print the contents of this list.
Select all	Select all items in the list.
Select none	Unselect all list items.
Invert selection	Invert the selection.
Open in Windows Explorer	Open Windows Explorer to show the folder containing the selected file.
Copy as path	Copy the path of the selected items to the clipboard.

6.4.7 History

In the **History** view you can see line charts visualizing the size development of the selected root folder. After each scan the size, allocated space, and number of files of the root folder are stored automatically in an XML file in the users profile of the currently logged-in user. These sizes are used to create this view. As a result the shown interval and frequency depends on the scans you have performed for this root before.

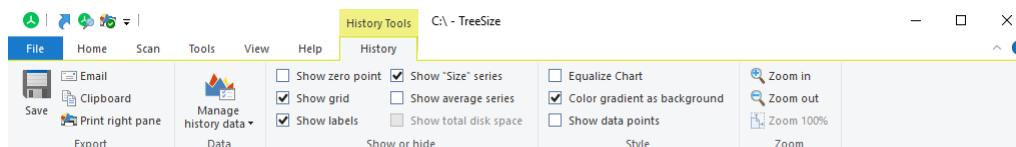
Please note:

- Only scans of the same path and the same [exclude filters](#)^[64] will be displayed in the history, since a common base is needed to compare scans.
- If you are interested in the size development of subfolders in the scanned file system tree, we recommend using our disk space manager [SpaceObServer](#), which archives file system information in a database and is able to track size development down to file level.



Context tab: History

Use the "History" tab to customize the appearance of the chart, to export the chart to a file, and to manage history data.



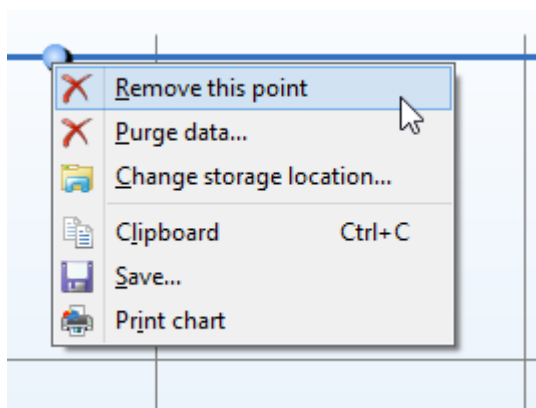
The following commands are available on the "History" tab:

- Save** Save the current chart as graphic file.
- Email** Export the current chart and send it via email. You can configure your email settings in options dialog.
- Clipboard** Copy the current chart to the clipboard, to paste it into other applications.
- Print right pane** Print the current chart.
- Manage history data** Provides actions for the export/import and purge of history data. Additionally allows choosing a new storage location for the data.
- Show zero point** Show zero point as minimum value in the chart.

Show "Size/Allocated" seires	Do not only show the currently selected value (size/allocated), but also the respective other one
Show grid	Show or hide horizontal and vertical grid lines for this chart.
Show average series	Show or hide a line indicating the average trend for this chart.
Show labels	Show info boxes (size values/number of files) in the chart.
Show total diskspace	Show or hide a horizontal line showing the total diskspace.
Equalize chart	defines wether the chart is displayed interpolated or exact.
Color gradient as background	Toggle the gradient in the background of the chart.
Show data points	Show or hide points on line chart.
Zoom in	Zoom in on the chart
Zoom out	Zoom out on the chart
Zoom 100%	Reset zoom to 100%

Remove data point

Using the context menu of the History view, you can remove single data points. Please note that this requires the "**Show data points**" option to be enabled (see above).



6.5 Drive List

The **Drive List** shows the local drives as well as the connected network drives. You can see the size of the drive as well as the free disk space. The **S.M.A.R.T.** column offers a quick info about the **health and hardware status** of supported devices.

Double-clicking starts a scan of the selected drive.

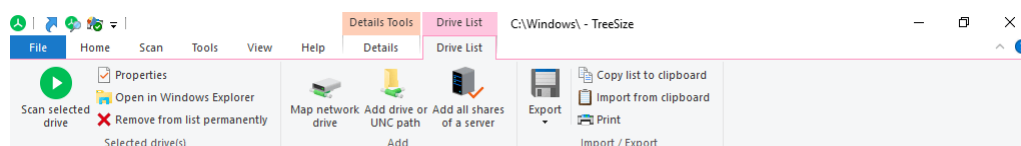
Name	Größe	Frei	% Frei	S.M.A.R.T.
C:	125 GB	110 GB	88 %	No SMART supp...
D:	989 MB	973 MB	98 %	No SMART supp...
T:	0,99 TB	520 GB	51 %	

Notes

- If you don't see your network drives in the Drive List, please refer to [this FAQ entry](#)¹⁰.
- S.M.A.R.T. is available only for local drives supporting the S.M.A.R.T. standard ([Self-Monitoring, Analysis and Reporting Technology](#)). Windows grants access to these values only to processes that have been started "as administrator" and if the installed driver supports this.
- Additionally to the listed drive UNC paths can be added using the right click menu.
- You can use wildcards when defining the paths to be scanned. This way, you can even scan paths like "S:\Users\R*" or "R:.*\MyVideos".
- You can scan all shared drives in a domain by entering the domain name in the drive combo box.
- The drive list can be automatically exported into an Excel, Text, or CSV file by using the [command line option](#)¹⁵⁶ "/EXPORTDRIVESLIST".

Context tab: Drive List

The Drive List has its own Ribbon context tab providing several additional actions for the Drive List.



The following commands are available on the "Drive List" tab:

Properties Shows the properties for the selected drive.

Open in Windows Explorer	Opens the currently selected drive(s) in the Windows Explorer.
Remove from list permanently	Removes the selected path or drive permanently from the list.
Map network drive	Opens the Windows "Map Network Drive" dialog.
Add drive or UNC path	Enables you to select or enter a path or drive and add it to the drive list.
Add all shares of a server	Adds all shares of a server to this list as UNC paths.
Export	Exports drive list information (path, size, free space, etc.) to an Excel or text file.
Copy list to clipboard	Copies drive list information (path, size, free space, etc.) to the clipboard.
Import from clipboard	Imports all paths currently contained in the clipboard into the drive list.
Print	Prints drive list information (path, size, free space, etc.).

6.6 Snapshots

The Snapshot feature of TreeSize provides a quick overview on the development of disk space usage for the selected path. A snapshot can be described as "photography" of the disk space status at a certain point in time. It is created within seconds and Windows will automatically delete it if the space it occupies is needed. The amount of disk space reserved for snapshots can easily be configured via TreeSize or the Windows System Configuration ([Tools](#)^[26] > Configure Windows System Restore).

Creating a snapshot

Creating snapshots from within TreeSize is only supported for local drives, not for network drives. You need to run TreeSize as administrator in order to be able to create snapshots.

To create a new Snapshot, please click the "Create snapshot" button on the "[Tools](#)^[26]" Ribbon tab. Creating the snapshot may take a moment.

If the feature is disabled on the system, no snapshot can be created for any local partition. Check the settings in your Windows environment via Control Panel > System and Security > Computer Protection : it must be switched to ON for the system partition and for every partition you want to use with the snapshot feature.

This feature is not supported on Windows XP.

Comparison with a snapshot

You can compare a current scan with a previous scan using the [comparison feature](#)^[58]. This gives you an in-depth overview of each folder and file and its size development since the creation of the given snapshot. Not only remote Windows systems are supported, but also non-Windows systems like storage system from NetApp and EMC.

6.7 Disk Usage Comparison

For a detailed analysis of your disk space usage it may be helpful not only to see the current usage, but also its development over time.

TreeSize provides a powerful comparison mode enabling you to analyze size development over a period of time. For that purpose, TreeSize compares data of the current scan with historical data. There are two different data sources available for the comparison:

- Previously saved TreeSize scans (XML report).
- Snapshots of the file system (available only for local NTFS drives).

To enable the comparison mode, please follow these steps:

1. Scan the path you want to view the size development for to get current results.
2. Go to [Scan](#)^[24] > [Compare with saved scan](#)^[25] or [Compare with snapshot](#)^[25].
 - If you selected "Compare with saved scan", you may now choose the XML file of the previously saved scan.
 - If you selected "Compare with snapshot", a dialog will open enabling you to choose a snapshot.
3. Select if you want to view size changes in the Directory Tree, in [Views](#)^[34], or both.

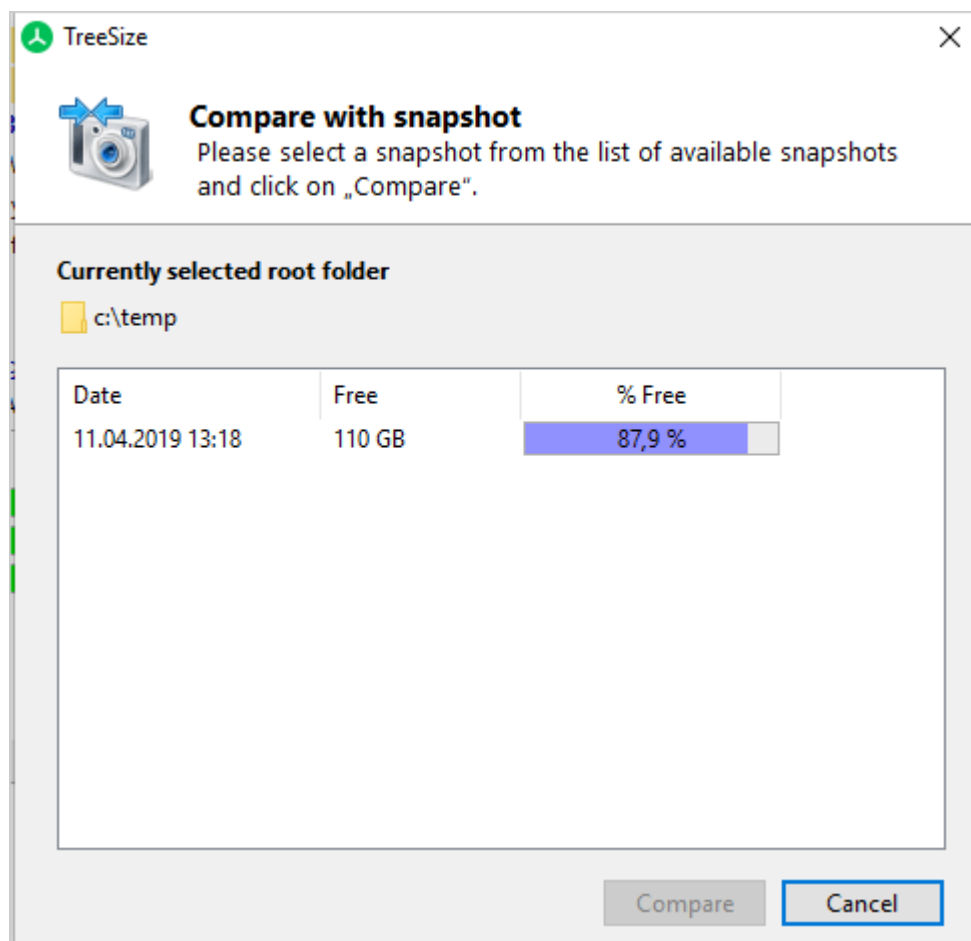
By comparing a scan result with a previous scan, you can easily see which files and folders were added and removed and analyze the space development in that time period. This can help to identify files and folders that grow in size regularly and could eat up your space quickly if not handled at an early stage.

Comparison with a snapshot

TreeSize provides several different ways to compare your scans with each other. The easiest way to do this is the [snapshot feature](#)^[57]. A snapshot could be described as a "photography" of the disk space status at a certain point in time. Major benefits of this mechanism are, that it can be created within seconds and Windows will automatically delete it if the disk space that it occupies is needed.

To compare a disk space scan with a snapshot, simply select a scan in the [Directory Tree](#)^[31]. Now click the "Compare with snapshot" button on the ["Scan"](#)^[24] Ribbon tab. You can also use the [Application Menu](#)^[18] ("File" > "Compare current scan" > "Compare with snapshot").

The following dialog shows a list of the available Snapshots sorted according to their time-stamp. It also shows the free space of each Snapshot, making it easy to spot exactly when the disk space on the hard drive where the current scan path resides on has increased or decreased. After selecting a Snapshot, click the "Compare" button to start the size comparison process.



Please note: if this list is empty or an error message "No snapshots available for this scan" appears, there are two possible reasons for that: either no snapshots are existing or not all necessary services are running on the destination system. You can verify this by doing a right-click on the destination directory, open properties and select the "Previous Versions" tab. If no snapshots are listed there, the program itself can also not list any entries. If you see entries there then not all required services have been running. These services have now been started implicitly by opening the dialog and if you now execute "Compare with snapshot" again, you should see the correct results.

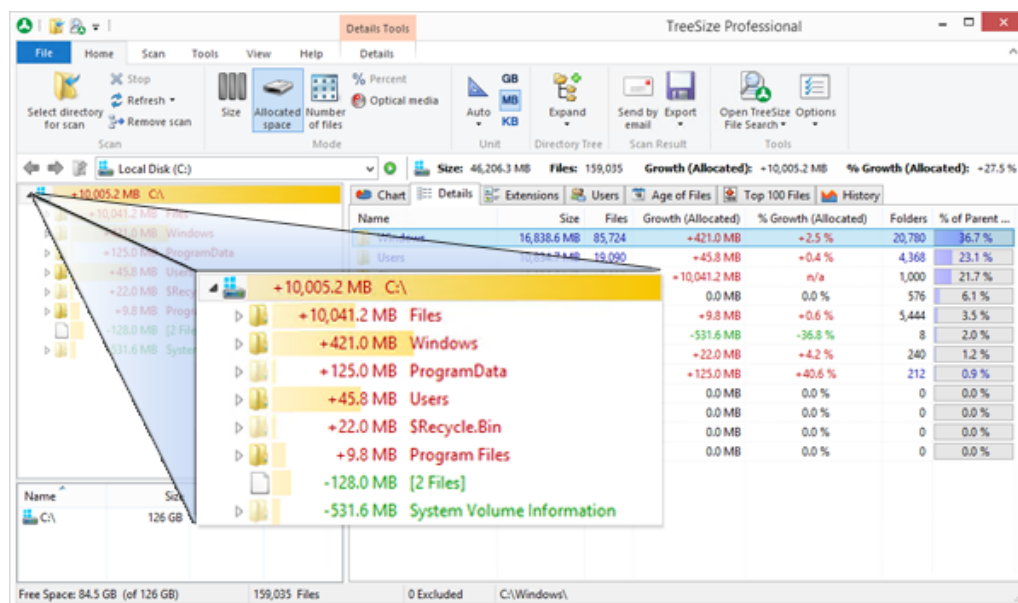
Comparison with saved scan

Scans results can be written into XML files at any given time, which provides a history of your disk usage. These files can be stored away and reused in a later step for detailed analysis. You can use this information to compare your current scan results with the situation at any given time in the past.

To compare a disk space scan with a saved scan, select a scan in the [Directory Tree](#)^[31] and click the "Compare with saved scan" button on the [Scan](#)^[24] Ribbon tab. You can also use the [Application Menu](#)^[18] ("File" > "Compare current scan" > "Compare with saved scan"). The subsequent dialog allows you to select a previous scan that has been saved into an XML file.

Displaying the comparison

The result of the size comparison can be viewed in the [Directory Tree](#)^[31], in the [Details](#)^[40] view, or in both at the same time.



Elements that are highlighted in red have increased the disk space usage compared to the saved scan or snapshot, while a green element indicates that the disk space usage is now lower than in the saved state used for comparison. You can choose whether you want to compare the size, the allocated space, or the number of files between the two scans by clicking the corresponding button in the [Home](#)^[22] Ribbon tab.

6.8 Options Dialog

The options dialog of TreeSize enables you to modify scan, appearance, and startup settings of the application as well as customize any supported export format (Text, Excel, etc).

These are the available options pages:

Scan

[General](#)^[62] General settings influencing the scan behaviour of TreeSize.

[Filter](#)^[64] Define filtering options for TreeSize.

View

[Display](#)^[66] General settings influencing the appearance of TreeSize.

[Details](#)^[68] Configure the columns shown in the [Details](#)^[40] view of TreeSize.

[Directory Tree](#)^[70] Customize the appearance of the [Directory Tree](#)^[31] of TreeSize.

[File Groups](#)^[72] Define which file extensions will be grouped together in the [Extensions view](#)^[45] of TreeSize.

[Age of Files](#)^[74] Configure the intervals used to generate the charts of the [Age of Files](#)^[49] view.

Export

[Printer](#)^[78] Configure printer settings for TreeSize.

[PDF](#)^[80] Configure the PDF file report of TreeSize.

[Excel](#)^[82] Configure the Microsoft Excel file report of TreeSize.

[HTML](#)^[85] Configure the HTML file report of TreeSize.

[CSV](#)^[87] Configure the CSV (comma-separated-values) file report of TreeSize.

[XML](#)^[89] Configure the XML file report of TreeSize.

[Text](#)^[90] Configure the plain text file report of TreeSize.

[Email](#)^[92] Configure email settings for TreeSize.

System

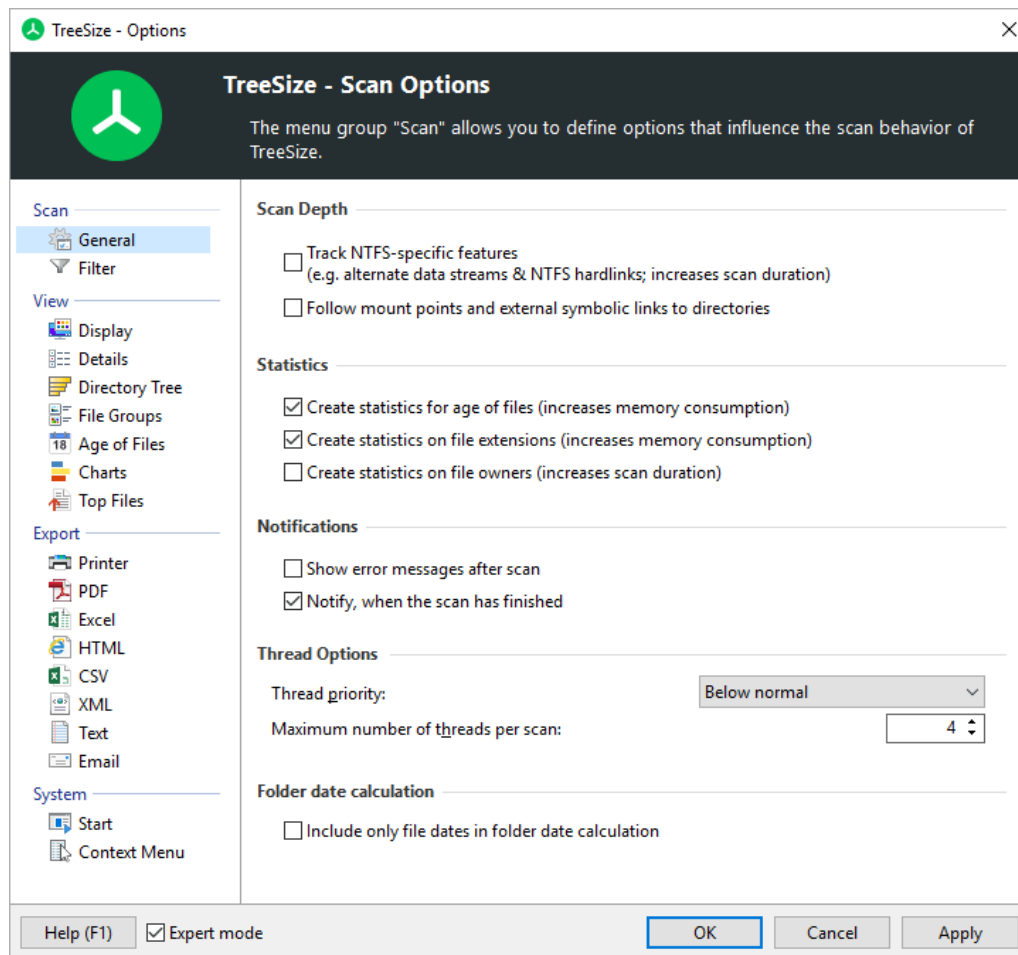
[Start](#)^[95] Modify startup settings for TreeSize.

[Context Menu](#)^[96] Configure the Windows Explorer context menu integration of TreeSize.

6.8.1 Scan

6.8.1.1 General

General settings influencing the scan behaviour of TreeSize.



Please note

- Changes applied here usually require a rescan of the currently scanned drives and folders to take effect.

Scan Depth

Track NTFS-specific features

With this option you can control whether TreeSize should check each file if it is just a [hardlink](#)^[174] to another file, if it contains [alternate data streams \(ADS\)](#)^[173] or uses the new NTFS compression features available in Windows 10. The will result in more accurate results for the allocated space, but will also slow down the speed of a scan.

Follow mount points and external symbolic links to directories

You can decide if TreeSize should follow symbolic links and mount points (see [Notes on NTFS](#)^[172] for additional information) that point to other drives or folders on other drives. Links that point within the scanned directory will never be followed in order to prevent circular references and folders from being counted twice.

Statistics

Create statistics for age of files

If this checkbox is activated, TreeSize will generate statistics for the age of files in each sub tree. The results can be viewed on the [Age of Files](#)^[49] view of the main window. The creation of these statistics will increase the memory consumption of the application.

Create statistics on file extensions

If this check box is activated, TreeSize will generate statistics for the file extensions in each sub tree. The results can be viewed on the [Extensions view](#)^[45] of the main window. The creation of these statistics will increase the memory consumption of the application.

Create statistics on file owners

If this check box is activated, TreeSize will generate statistics for the file owners in each sub tree. The results can be viewed on the [Users view](#)^[47] of the main window. Since it is necessary to query the owner of each file, this option will slow down the scanning process if activated.

Notifications

Show error messages during scan

Use this option to decide whether TreeSize should show error messages during scanning. If you, for example, scan a network drive on a Windows server and don't have reading access to all folders, Windows will pop up an error message for every unreadable folder. If you don't want the scanning process interrupted by these message boxes, uncheck this check box.

Notify when the scan is finished

Shows a message in the Windows system tray, once a longer running scan is finished.

Thread Options (expert option)

Thread Priority

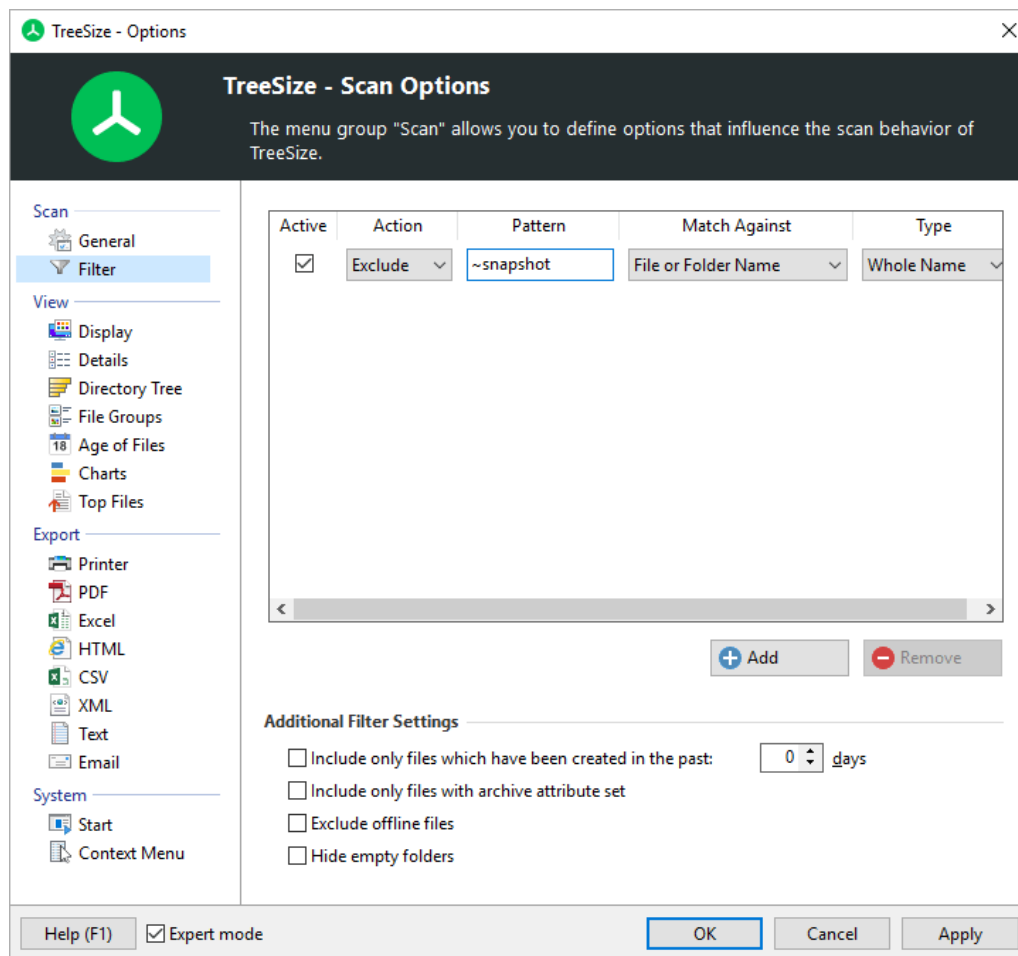
Enables you to define the priority with which the threads scanning the hard disk are running. "Idle" means that the CPU will be used only if no other threads are using it. "Idle" is a good setting if you want to make sure that a scan with TreeSize has no impact on the performance of the PC or server. The default and recommended value is "lower priority". Choosing a higher priority will result in the scan threads having a higher priority than the thread of the user interface, which can make the user interface unresponsive during a scan. This setting is also used for the threads of the [TreeSize File Search](#)^[99].

Maximum number of threads per scan

TreeSize automatically adjusts the number of threads to the CPU usage. This option lets you define the maximum number of threads that will be started for a scan. If the system load is high, fewer than the maximum number of threads may be started.

6.8.1.2 Filter

Define filtering options for TreeSize. If you need information about e.g. certain file types only, you can specify a filter using this options page. Please note that changes on this options page usually require a rescan of the currently scanned drives and folders to take effect.



How to define a filter (exclude or include)

To define a new filter, please follow these steps:

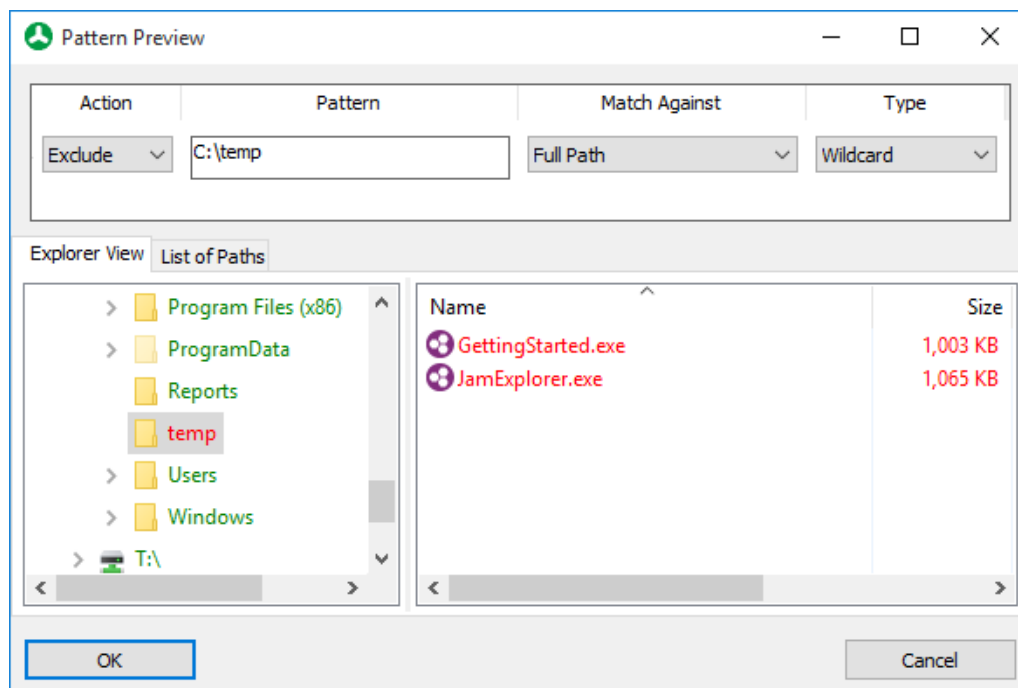
1. Click the "Add pattern" button. An entry will be created in the filters list for the new filter.
2. Decide whether this filter shall operate as an **exclude** or **include** filter using the "**Action**" selector of the newly created entry. An exclude filter for the pattern "*.exe" for example will make TreeSize to not show any files with the extension ".exe". This will also affect the calculated values such as the

"Size" in the [Directory Tree](#)^[31] as well as any other [view](#)^[34]. An include filter, on the other hand, will make TreeSize show only items that match this pattern. To return to the previous example, an include filter of "*.exe" would result in a Directory Tree showing only data related to files that have the extension ".exe". If you have chosen to match against **File Type**, the edit field will show a dropdown button that allows to choose [file type groups](#)^[72] like "Office files" or "Video Files".

3. Define the actual pattern. You can either use simple **Wildcard pattern** such as "*.exe", **Regular Expression** patterns such as ".+\\.exe\$", or patterns that match **full names** like "notepad.exe". Please make sure that you select the matching pattern type on the "**Type**" selector on the right side of the window.
4. The "Match Against" selector is used to specify the element/attribute against which the pattern is compared. Patterns can either be matched against file names, (full) paths, owners, folder names, or object names. You can use the "owner" filter to, for example, include or exclude certain file owners from the TreeSize scan results. With the "full paths" or "folder name" filter you can include or exclude complete directory branches matching a certain pattern (e.g. "\\Program Files*"). The "file name" filter should be used when you intend to include or exclude certain file extensions (e.g. "*.tmp"), like described in step 2.

Preview the results

The "Preview" button enables you to view the results of a defined search pattern. The preview will use the currently selected pattern to show an Explorer-like view highlighting excluded and included items in appropriate colors (red and green). The following screenshot shows the results of an exclude filter for full paths that match the pattern "Program Files".



The following list describes additional filter settings that can be defined on this options page.

Additional Filter Settings

Include only files created in the past ... days

If this option is set, only files and folders which have been created within the specified amount of days will be scanned. This can be useful to calculate the size of backups or to identify "heavy growing" folders. A value of "0" means that all files will be included (default).

This is a volatile setting and won't be persisted. It applies to the running instance of TreeSize only.

Include only files with "archive" attribute

Check this option if you want to count only files for which the "archive" attribute has been set. This can be useful to determine the size of backups.

This is a volatile setting and won't be persisted. It applies to the running instance of TreeSize only.

Exclude offline files

This option enables you to exclude files that are marked as "offline". Offline files are often not physically present on the disk or are only cached temporarily on the local disk.

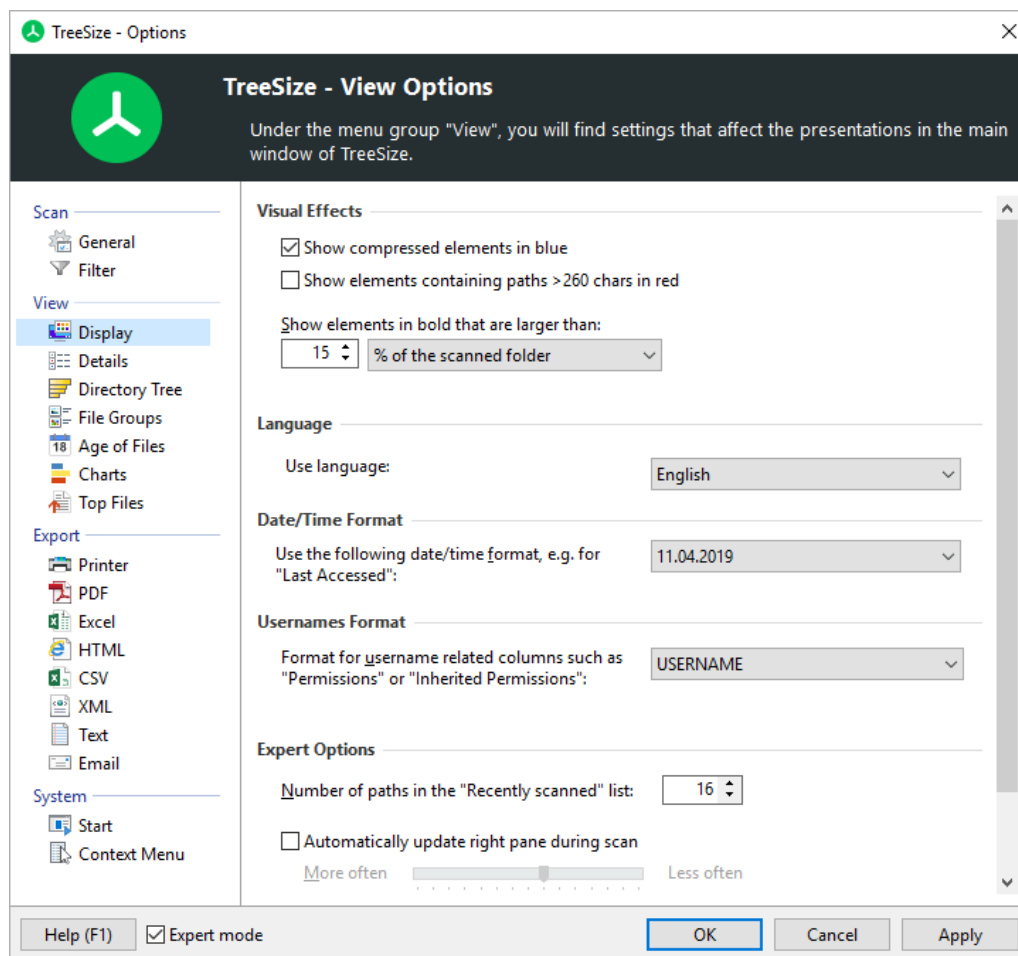
Hide empty folders

Check this option to hide empty folders from the view. A folder is considered empty if no file or folder has been found or if all contained files have been filtered.

6.8.2 View

6.8.2.1 Display

General settings that influence the appearance of TreeSize.



Visual Effects

Show compressed files and folders in blue

If this option is selected, compressed files on an NTFS volume are shown in a blue color. Folders that are partially compressed will have a dark blue color, files and folders that are entirely compressed will show up in a light blue color. For more information on file-based compression see [Notes on NTFS](#)^[172].

Show folders containing paths >260 chars in red

Select this option, if folders containing long paths should appear in a red color. This is useful for finding file system structures that exceed the Windows [MAX_PATH](#) constant. Many tools and the .NET framework have problems with these long paths. Using the [custom search](#)^[125] of the TreeSize File Search you also can search for such files.

Show folders in bold that are larger than ...

Use this option to define a threshold at which folders in TreeSize will be shown bold. You can either define a percentage value [% of the scanned folder] or a size value [Megabytes (allocated space)]. Folders will be shown bold in the [Directory Tree](#)^[31] and in the [Details view](#)^[40] of TreeSize.

Language

Use language

Select the language that is used for TreeSize's user interface.

Date/Time Format

Use the following date/time format, e.g. for "Last Access":

The date/time format that is used by TreeSize in related columns like "Last Access", "Last Change", or "Creation Date" can be defined here. Available formats are date, date+time (without seconds), and date+time (with seconds). Please note that in some rare cases TreeSize may display "wrong" date/time format. For more information on this issue, please refer to [this article](#) from our Knowledge Base.

Username format

Offers various choices how usernames should be displayed.

Expert Options

Number of paths in the "Recently scanned" list:

Here you can adjust the maximum number of entries shown in the "File -> Recently scanned" list. The maximum value for stored paths is 20.

Automatically update right pane during scan

If this option is selected, the right pane of the window will be updated from time to time. This allows you, for example, to watch the bars of a chart growing while scanning large drives. Use the drag bar to set the interval of the updates.

Determine icons based on file extension only

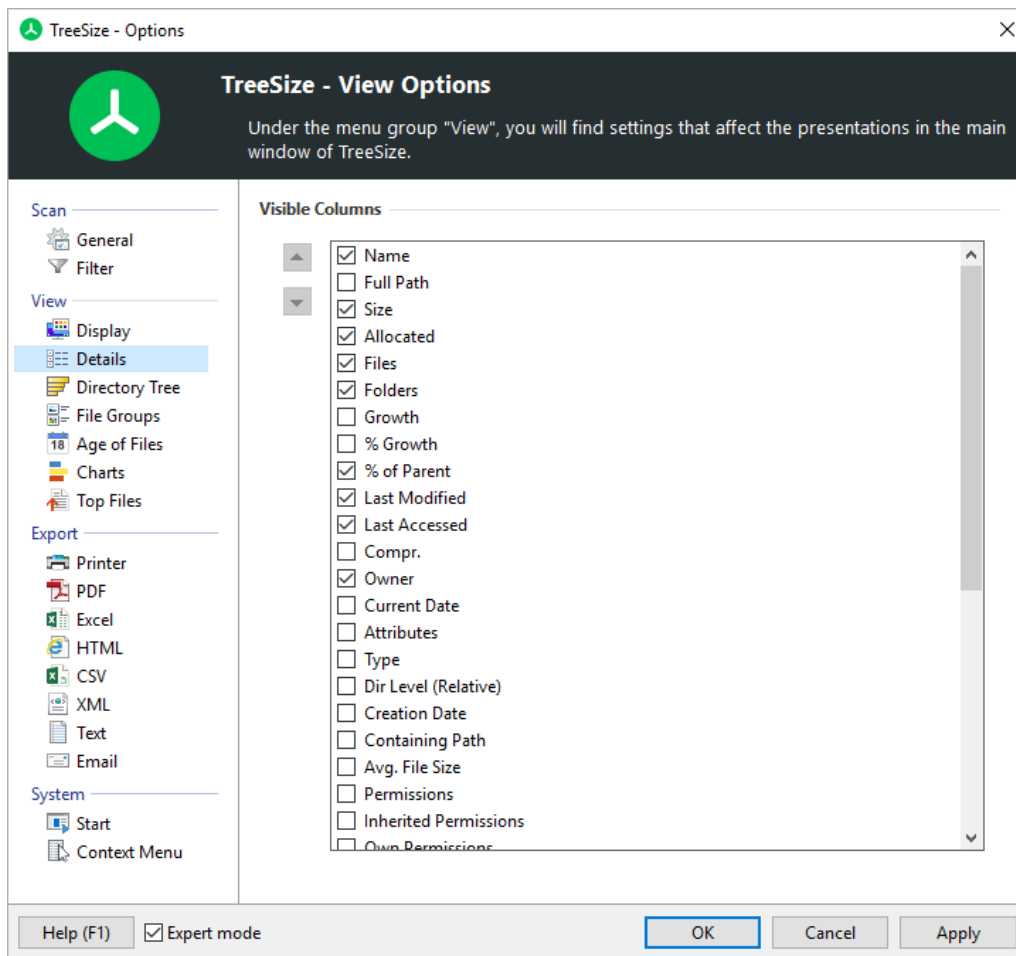
If this option is selected, the default icon for files based on the file extension is used. This is much faster, especially on network drives.

Enable Drag & Drop

Allows to deactivate the drag and drop features of TreeSize. Turning off drag and drop should prevent unwanted changes on critical systems.

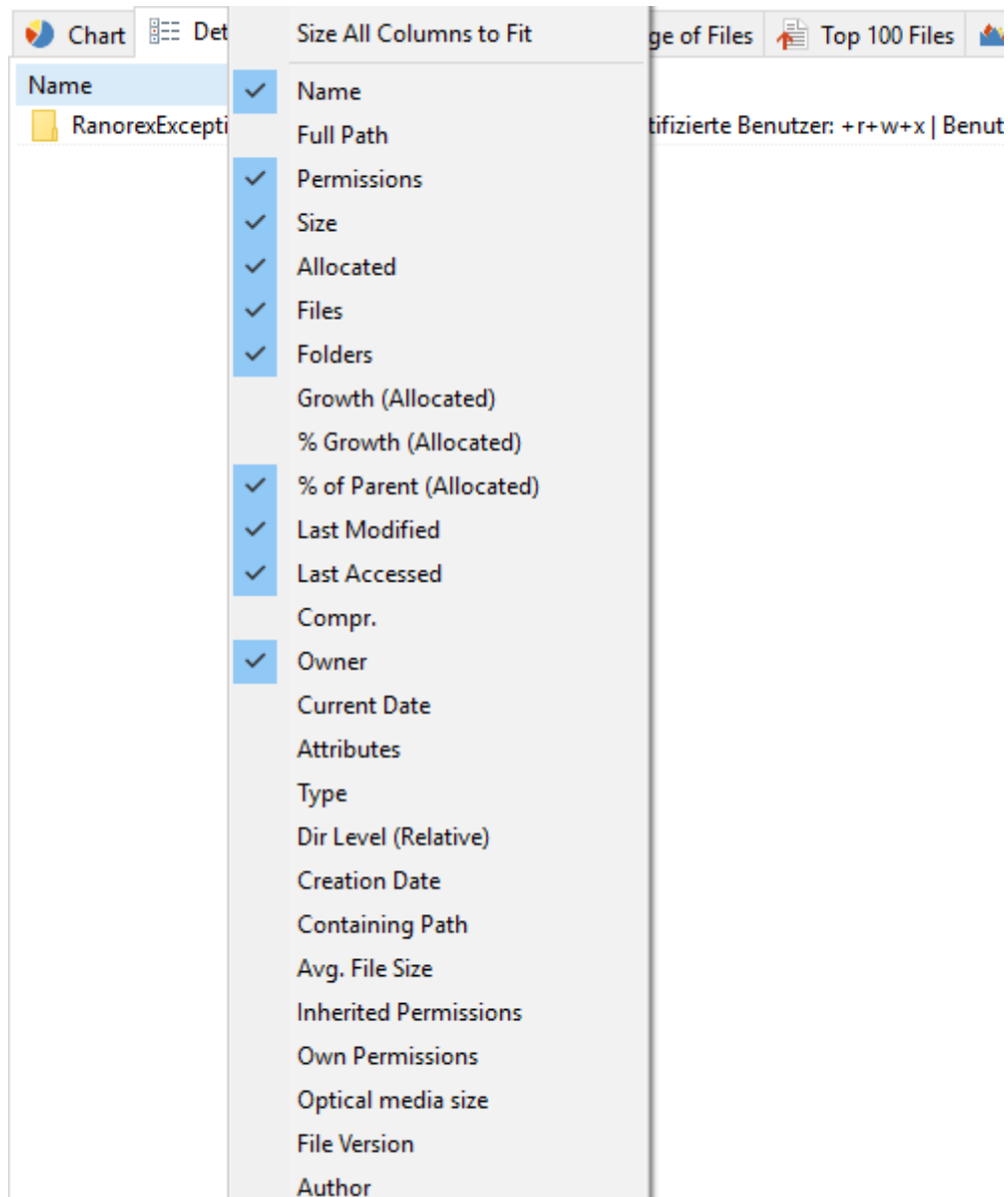
6.8.2.2 Details

This options page can be used to configure the columns shown in the [Details](#)⁴⁰⁾ view of TreeSize. For a description of the available columns please refer to "[Available columns](#)"⁴³⁾.



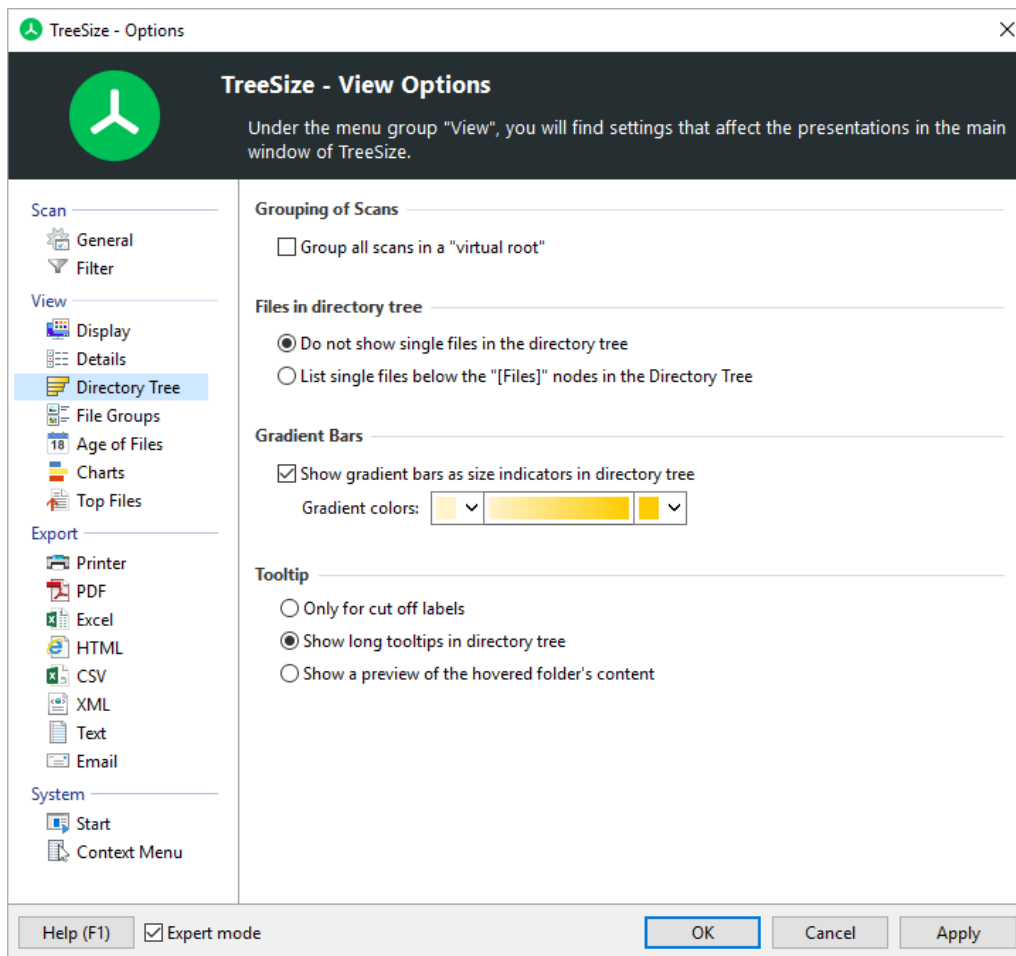
Notes

- You can change the ordering of columns using the arrows on the left. Click the desired column first, then click an arrow to move the column up/down.
- The column that should be visible in the Details view can also be configured by right-clicking the column header (see screenshot below).



6.8.2.3 Directory Tree

Use these options to customize the appearance of the [Directory Tree](#)^[31] of TreeSize.



Grouping of Scans

Group all scans in a virtual root

Group scans under a virtual root folder showing summarized values for all scans that are part of this group.

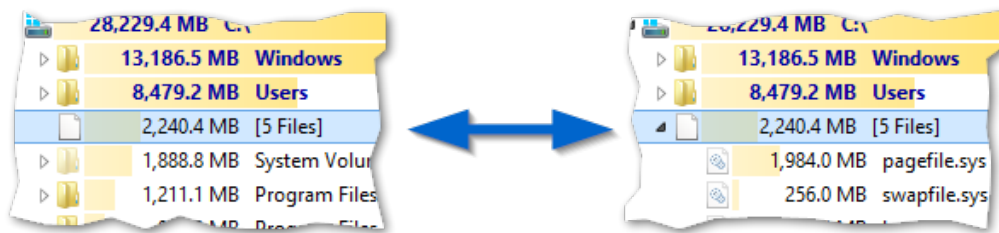
Files in Directory Tree

Do not show single files in the Directory Tree

If this options is activated, files will grouped into a special node with the name "[Files]". This improves browsing of the directory tree, since you won't have to bother with individual files on each folder level.

Show single files in directory tree

If this option is activated, the directory tree will list single files.



Gradient Bars

Show gradient bars as size indicators in directory tree

If this option is active, a gradient bar is shown in the background of every folder in the directory tree that indicates the size of the folder in relation to the entire scanned file system tree. Use the color picker below to define a custom color gradient.

Tooltip

Only for cut off labels

Typically no tooltip is shown. In case the text does not entirely fit into a label, the full text will be shown as tooltip.

Show long tooltips in directory tree

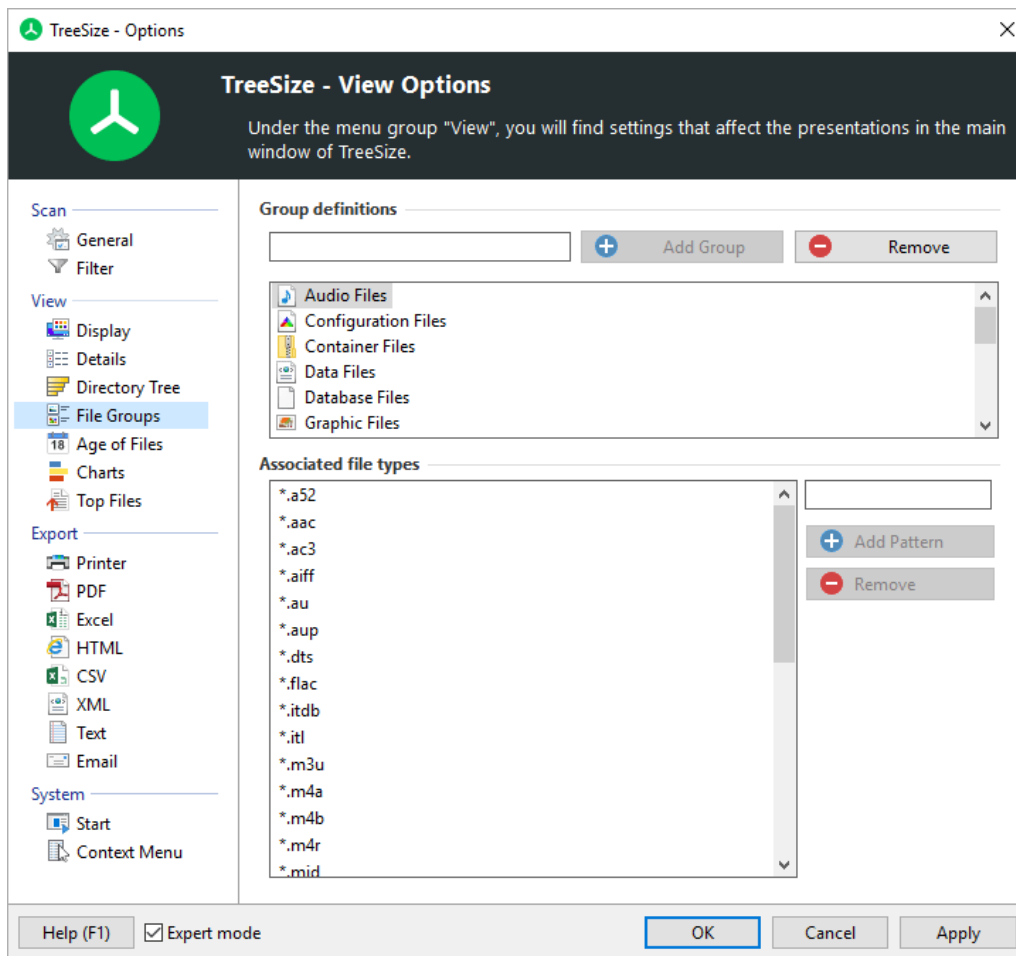
If this option is active, a tooltip window with detailed information will be shown if the mouse cursor hovers over a folder for a while. This is useful if you want to take a look at detailed information of a folder without switching to the "Details" view,

Show a preview of the hovered folder's contents

Allows you to peek into a folder without actually expanding the folder in the directory tree.

6.8.2.4 File Groups

This page allows you to define which file extensions will be grouped together in the [Extensions view](#)^[45] of TreeSize.



Adding a new group

1. Enter the name of the group (e.g. "Text files") in the "Group definitions" text field on top of the page.
The name is shown in the left column of the [Extensions view](#)⁴⁵.
2. Click "Add Group".
3. In the popup window, enter a meaningful description for the new group (e.g. "Plain text files, log files, etc.").
4. Click the text field in the "Associated file types" area and enter the desired file extensions (e.g. "*.txt").
5. Click "Add Pattern".
6. Repeat the step 4 and 5 until you have added all of the desired file extensions.
7. Click "Apply" to save the settings.

Add/remove/edit file extensions of an existing group

1. Click the desired file extensions group in the "Group definitions" on top of the page.

2. Add new file extensions like described in steps 4 and 5 above
or
use the "Remove" button on the right to remove an existing file extension from the list
or
right-click on an existing file extension and click "Edit Pattern" to change the pattern of an item.
3. Click "Apply" to save the settings.

Edit caption and description of an exiting group

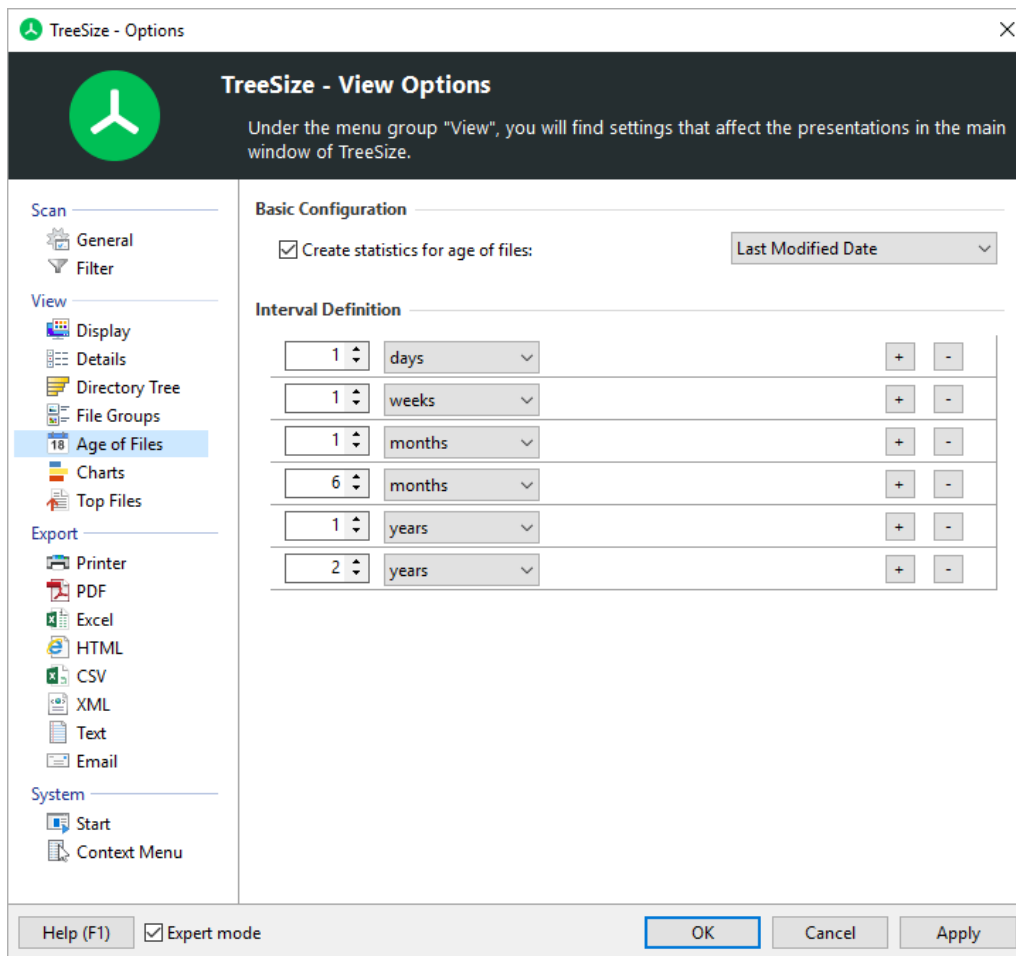
Simply right-click on the desired group and select "Edit Caption" or "Edit Description".

Export/import list of file extensions

For existing groups, you can export the definition of file extensions by right-clicking on the "Associated file types" listing and selecting "Export". A text file containing one file extension in each line will be created. You can import a definition into an existing group in the same way.

6.8.2.5 Age of Files

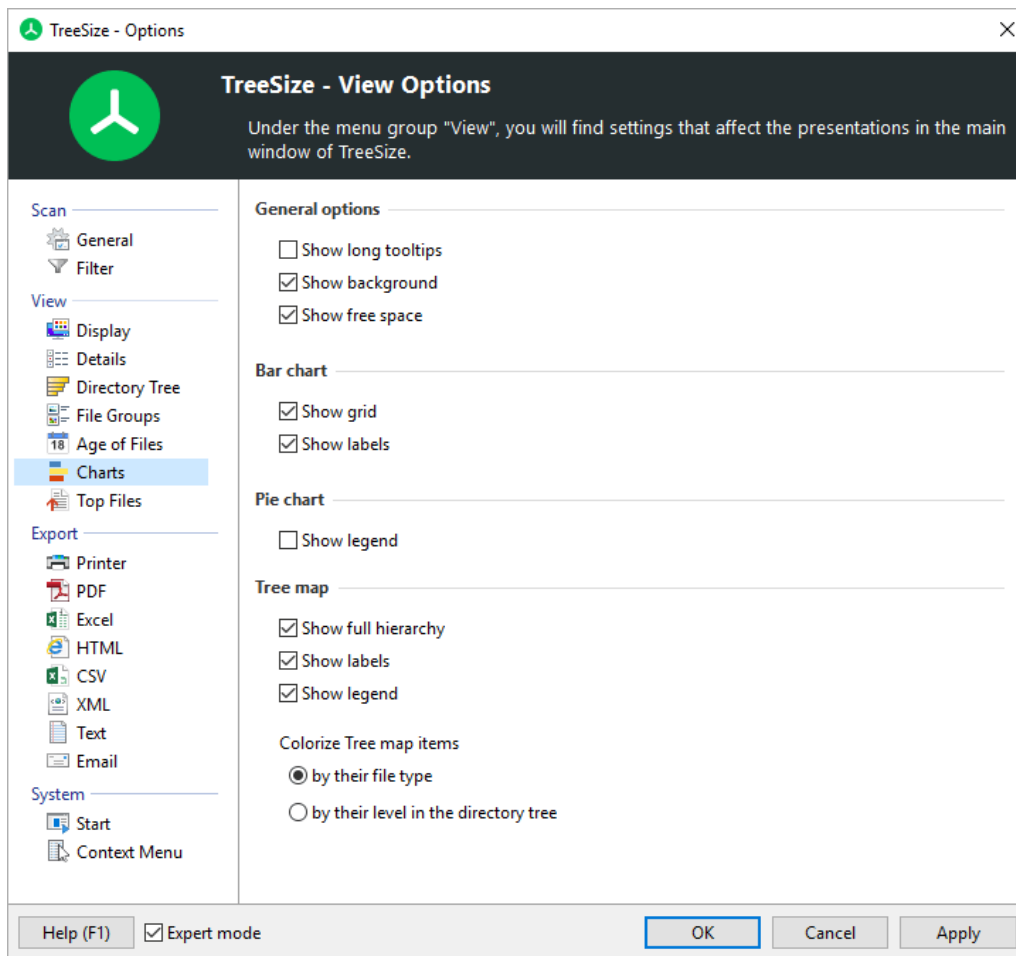
This options page allows you to configure the intervals used to generate the charts of the [Age of Files](#)^[49] view.



You may change the limit of each interval, add additional intervals using the '+' button, or remove intervals using the '-' button. You can turn off the creation of the "Age of Files" statistics using the check box on top of the list. This will slightly reduce the memory usage of TreeSize. Furthermore, you can select whether the file ages should be determined based on the "Last Access Date", the "Last Change Date" (default) or the file "Creation Date".

6.8.2.6 Charts

This section contains options that change the amount of information that is shown in the chart related views of TreeSize and the way that they are displayed.



General Options

Show long tooltips

Activate this option to include additional tooltip information to the charts about the data that is currently being displayed.

Show background

Adds a color gradient to the background of the charts tab.

Show legend

Provides a description of the different segments that are included in a chart. The legend is shown below the chart.

Show free space

Includes a separate segment to the chart that indicates the amount of free space that is available on the drive that is currently being displayed.

Bar chart

Show grid

Adds a grid to the chart that corresponds to the current segmentation on the x-axis on the chart.

Show labels

Additional labels for each segment that contain name and size information.

Pie chart**Show legend**

Provides a description of the different segments that are included in a chart. The legend is shown below the chart.

Tree map**Show full hierarchy**

If activated, TreeSize will show the full directory structure when displaying the tree map. If deactivated, it will only show the deepest nesting of the hierarchy, which means that only files and folders without subfolders will be shown.

Show labels

These labels describe which file, or folder is currently being displayed in the different tiles of the tree map.

Show legend

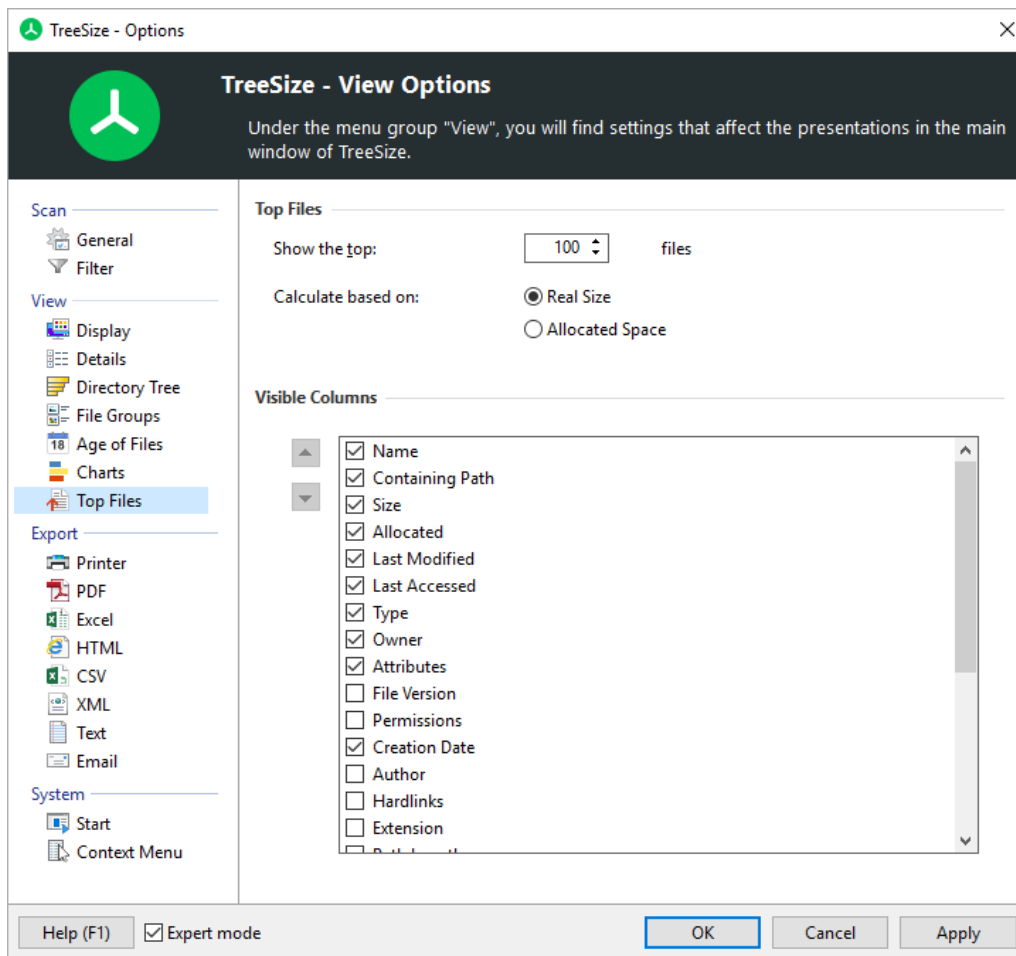
Provides a description of the different segments that are included in a chart.

Colorize Tree map items

This option allows to change how items are colorized in the tree map. You can either select to use different colors for different file types, or to highlight the level of a file within the file system with a corresponding color.

6.8.2.7 Top Files

This options page allows you to configure any options that apply to the [Top 100 files](#)^[51] view.



Top Files

By default, TreeSize will identify the 100 largest files within a scan and show them in a separate view. To adjust this number, or the way that these files are determined, change the appropriate option in this section.

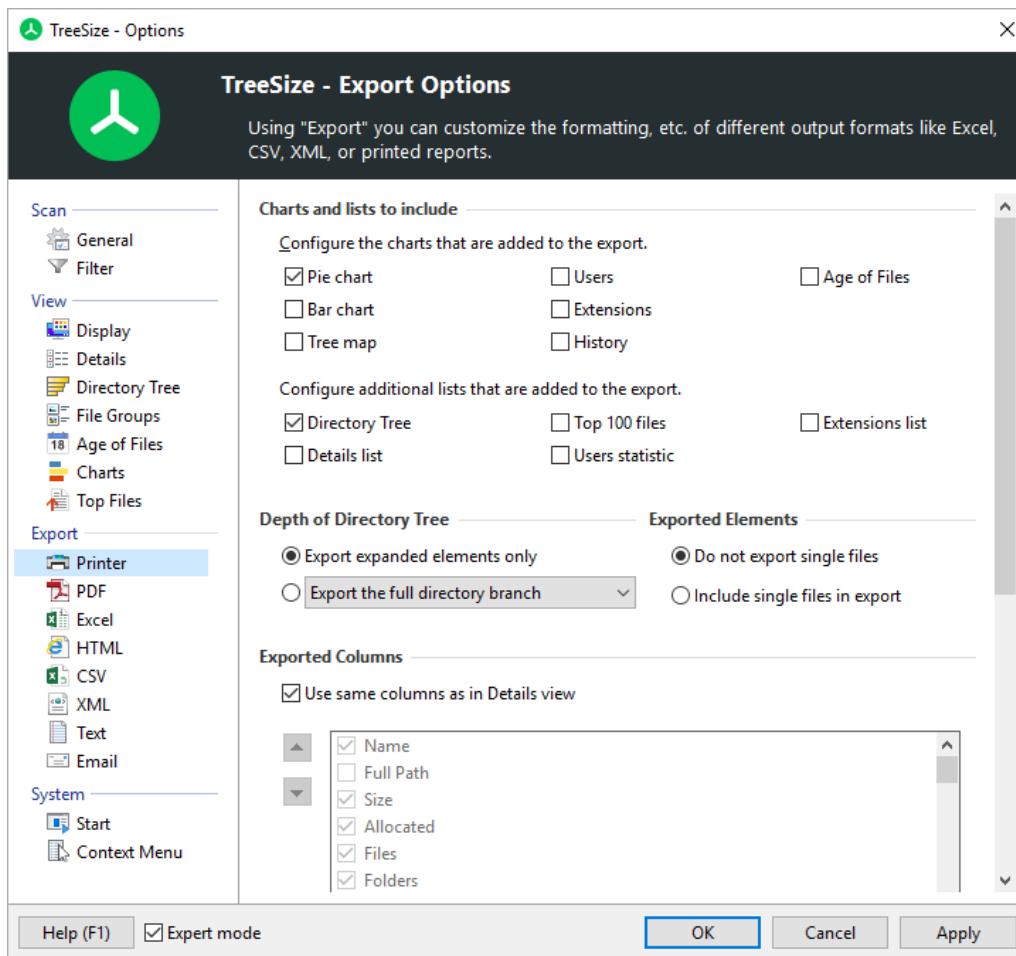
Visible Columns

All [columns](#)^[43] that are checked in this list will be shown in the top files list. By using the arrow buttons, you can also modify the order of columns that are displayed. You can also change them in the user interface directly, by right clicking the column header of the top files list and selecting the desired columns from the context menu.

6.8.3 Export

6.8.3.1 Printer

Configure printer settings for TreeSize.



Charts and lists to include

Configure the charts and lists that are added to the export

Check all the different chart types and list types that shall be included in the report that will be printed.

Depth of Directory Tree

Export expanded folders only

Only the expanded/visible parts of the [Directory Tree](#)³¹ will be printed.

Export the full directory branch

If this option is selected, the complete [Directory Tree](#)³¹ will be printed.

Exported Elements

Do not export single files

If this option is selected, single files will not be printed. Instead, their values such as "Size" and "Allocated" will be aggregated into a special node "[Files]".

Include single files in export

If activated, single files will be printed. This may result in very large reports compared to exporting the files in a grouped view (see option above).

Exported Columns

Use the column list to specify which information shall be included in printed reports. A list of all available columns with their descriptions can be found [here](#)^[43].

Use same columns as in details view

Activate this option if you want to use the same columns that are currently used in the [details view](#)^[40].

Size of selected column

Define a pixel size that is used for this column when printing the report.

Formatting

Use bold text and colors for printed reports too

Turn this option on to apply the settings for bold folder names for printed reports.

Setup

Print Setup...

Opens a dialog that allows to select the default printer, as well as the size and orientation of the printed report.

Page Setup

Margin Left/Top/Right/Bottom

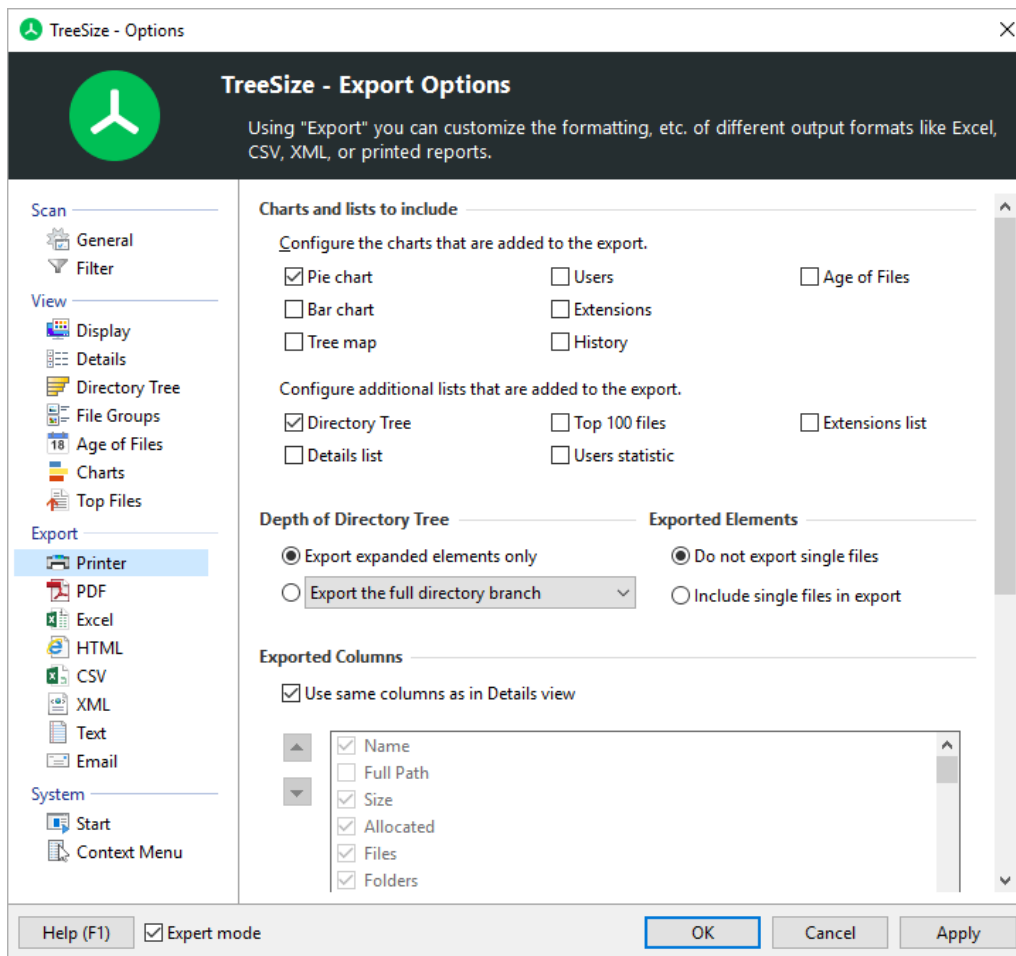
Change these margins to increase or decrease the spacing that is left near the edges of the report.

Page orientation

Use "Portrait" for a vertically aligned report, or "Landscape" for horizontal alignment.

6.8.3.2 PDF

Configure the PDF file report of TreeSize.



Charts and lists to include

Configure the charts and lists that are added to the export

Check all the different chart types and list types that shall be included in the report of this export type.

Depth of Directory Tree

Export expanded folders only

Only the expanded/visible parts of the [Directory Tree](#)³¹⁾ will be exported.

Export the full directory branch

If this option is selected, the complete [Directory Tree](#)³¹⁾ will be exported.

Exported Elements

Do not export single files

Single files will not be included in the report. Instead, their values such as "Size" and "Allocated" will be aggregated into a special node "[Files]".

Include single files in export

Single files will be listed in the report. This may result in very large reports compared to exporting the files in a grouped view (see option above).

Exported Columns

Use the column list to specify which information shall be included in PDF exports. A list of all available columns with their descriptions can be found [here](#)^[43].

Use same columns as in details view

Activate this option if you want to use the same columns that are currently used in the [details view](#)^[40].

Include header information

Use this option to control whether header information (such as the title and date of the report) and the column headers should be added to the exported file.

Formatting

Use bold text and colors for reports too

Turn this option on to apply the settings for bold folder names for PDF reports.

Page Setup

Margin Left/Top/Right/Bottom

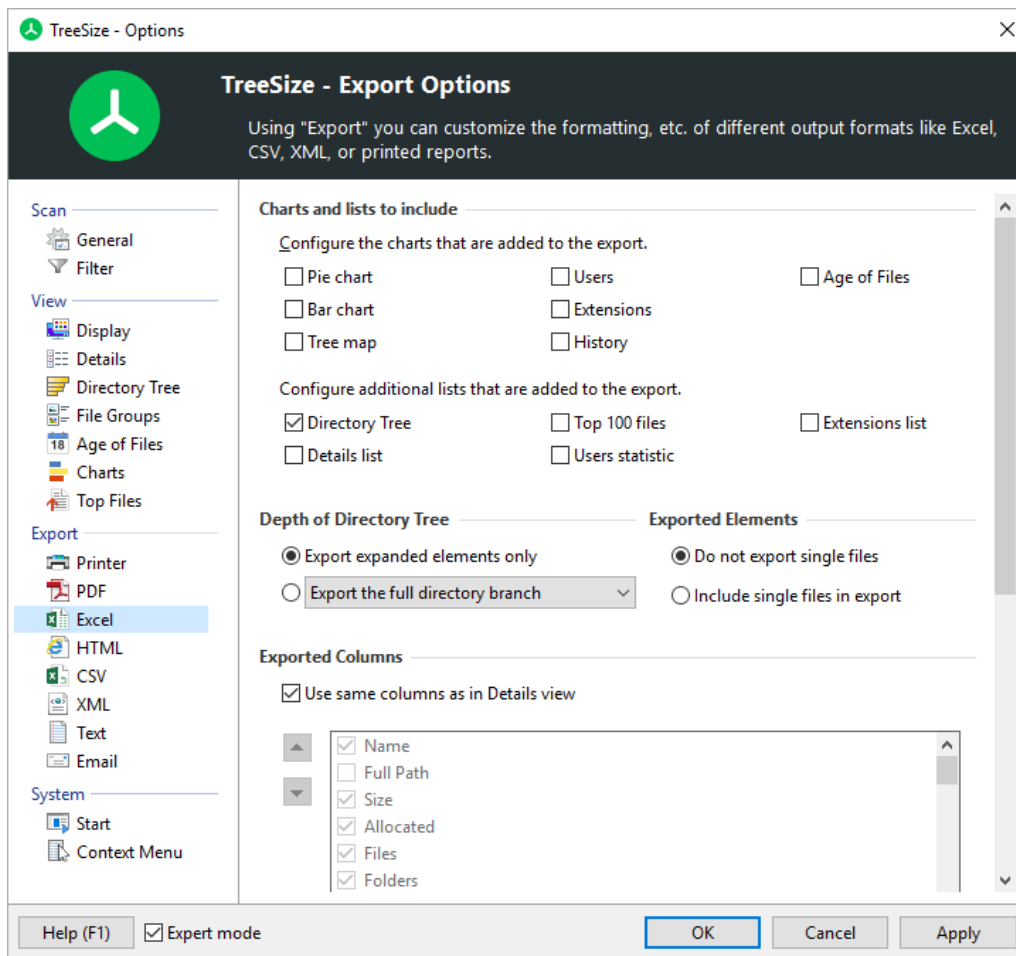
Change these margins to increase or decrease the spacing that is left near the edges of the report.

Page orientation

Use "Portrait" for a vertically aligned report, or "Landscape" for horizontal alignment.

6.8.3.3 Excel

Configure the Microsoft Excel file report of TreeSize.



Charts and lists to include

Configure the charts and lists that are added to the export

Check all the different chart types and list types that shall be included in the report of this export type.

Depth of Directory Tree

Export expanded folders only

Only the expanded/visible parts of the [Directory Tree](#)³¹⁾ will be exported.

Export the full directory branch

If this option is selected, the complete [Directory Tree](#)³¹⁾ will be exported.

Exported Elements

Do not export single files

Single files will not be included in the report. Instead, their values such as "Size" and "Allocated" will be aggregated into a special node "[Files]".

Include single files in export

Single files will be listed in the report. This may result in very large reports compared to exporting the files in a grouped view (see option above).

Exported Columns

Use the column list to specify which information shall be included in Excel exports. A list of all available columns with their descriptions can be found [here](#)^[43].

Use same columns as in details view

Activate this option if you want to use the same columns that are currently used in the [details view](#)^[40].

Included information

Include summary information

Use this option to specify whether a short summary information, such as the title and date of the report, should be added to the exported file.

Include units in export

If this options is activated, units like "KB", "MB", or "%" will be included in the exported data. Uncheck this option, if you want to export plain values.

Size unit

The size unit that will be used for the export of Excel files. You can either select a specific unit from Byte to Terabyte, let TreeSize automatically determine the optimal unit, or use the same unit that was last used in the user interface.

Default Target File

Path of the default target file

Specify a file to which exported data should be written by default.

Formatting (Expert mode)

Use bold text and colors for reports too

Applies color and formatting options, such as bold text for larger folders, to generated reports as well.

Generate expandable/collapsible Excel report

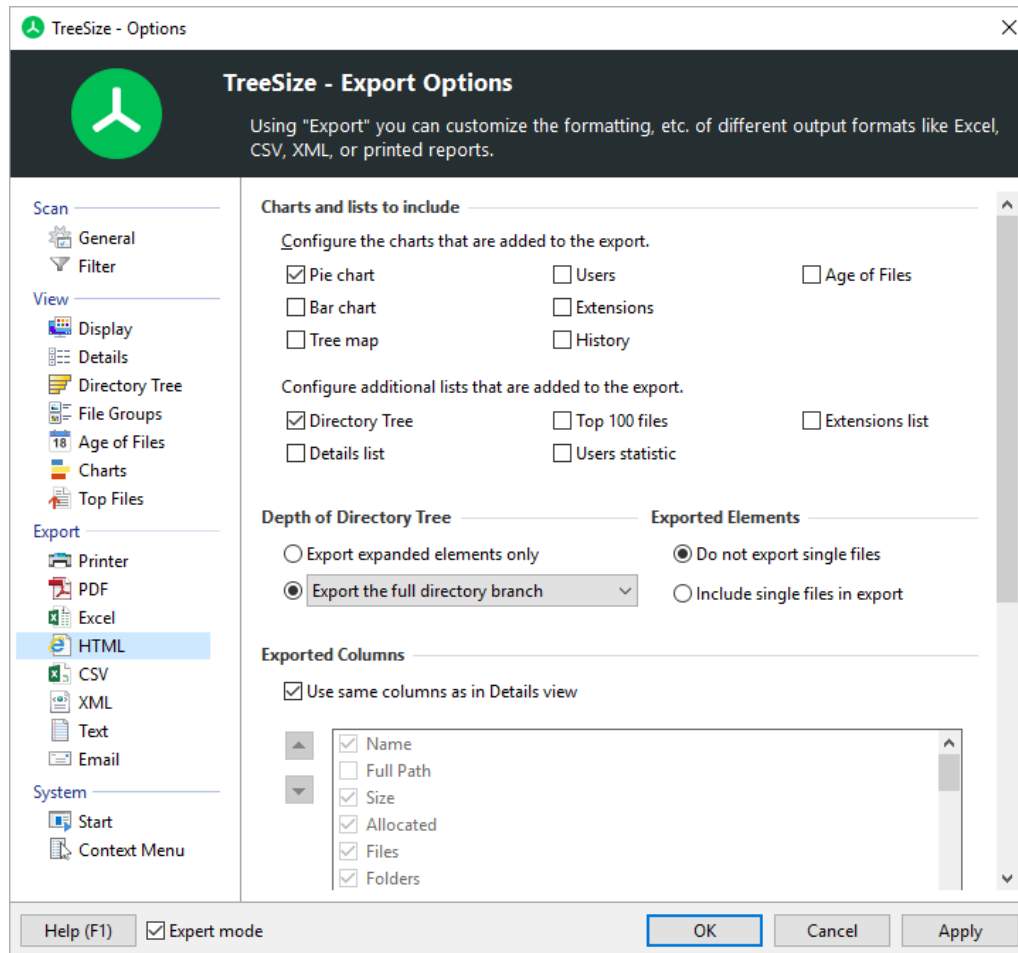
A dynamic Excel report will be created in which items such as folders can be expanded/collapsed just like in the Directory Tree.

Format file and folder paths as

Chose in which way the paths of files and folders should be formatted in the Excel report. Paths can be formatted either as plain text or as hyperlinks.

6.8.3.4 HTML

Configure the HTML file report of TreeSize.



Charts and lists to include

Configure the charts and lists that are added to the HTML export

Check all the different chart types and list types that shall be included in the report of this export type.

Depth of Directory Tree

Export expanded folders only

Only the expanded/visible parts of the [Directory Tree](#)³¹⁾ will be exported.

Export the full directory branch

If this option is selected, the complete [Directory Tree](#)^[31] will be exported.

Exported Elements

Do not export single files

Single files will not be included in the report. Instead, their values such as "Size" and "Allocated" will be aggregated into a special node "[Files]".

Include single files in export

Single files will be listed in the report. This may result in very large reports compared to exporting the files in a grouped view (see option above).

Exported Columns

Use the column list to specify which information shall be included in HTML exports. A list of all available columns with their descriptions can be found [here](#)^[43].

Use same columns as in details view

Activate this option if you want to use the same columns that are currently used in the [details view](#)^[40].

Included information

Include summary information

Use this option to specify whether a short summary information, such as the title and date of the report, should be added to the exported file.

Include units in export

If this options is activated, units like "KB", "MB", or "%" will be included in the exported data. Uncheck this option, if you want to export plain values.

Size unit

The size unit that will be used for the export of Excel files. You can either select a specific unit from Byte to Terabyte, let TreeSize automatically determine the optimal unit, or use the same unit that was last used in the user interface.

Style Sheet

Path of the optional style sheet

Define an optional style sheet which will be used to customize the created report.

Formatting (Expert mode)

Use bold text and colors for reports too

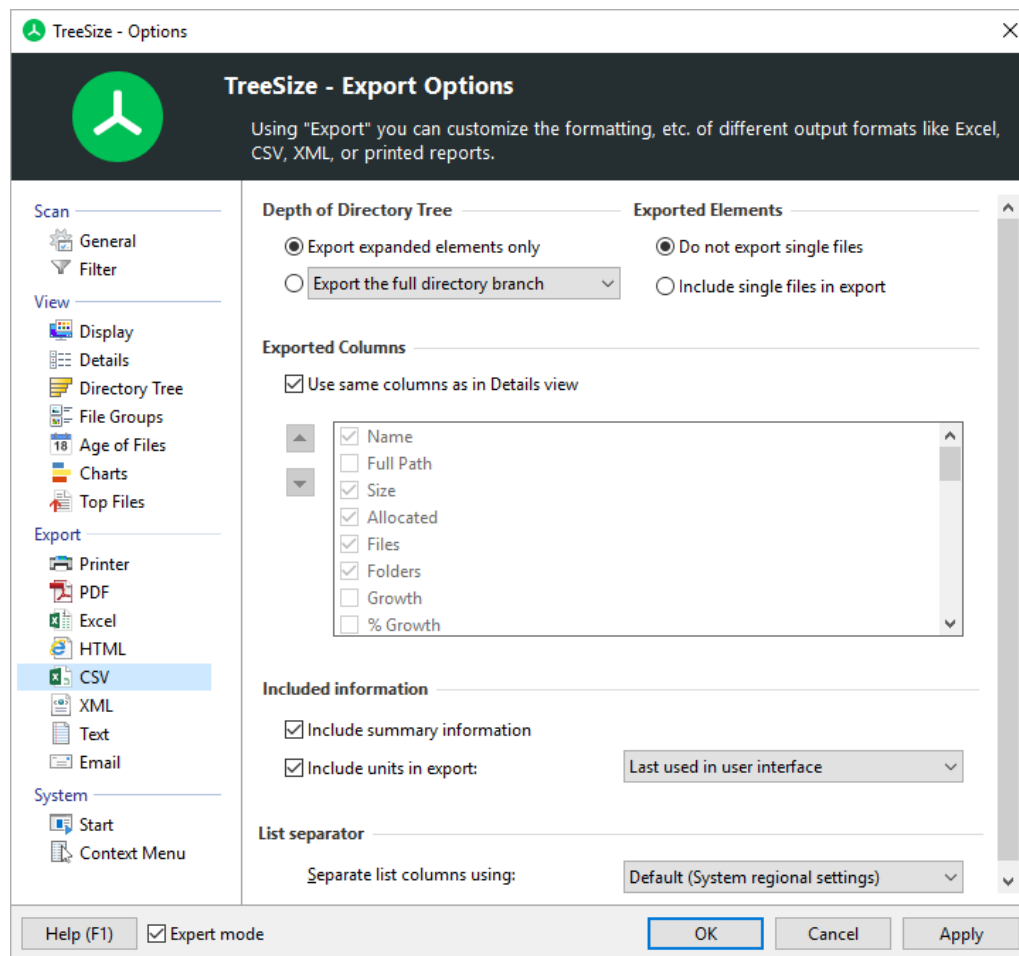
Applies color and formatting options, such as bold text for larger folders, to generated reports as well.

Format file and folder paths as

Chose in which way the paths of files and folders should be formatted in the Excel report. Paths can be formatted either as plain text or as hyperlinks.

6.8.3.5 CSV

Configure the CSV file report of TreeSize.



Depth of Directory Tree

Export expanded folders only

Only the expanded/visible parts of the [Directory Tree](#)³¹⁾ will be exported.

Export the full directory branch

If this option is selected, the complete [Directory Tree](#)³¹⁾ will be exported.

Exported Elements

Do not export single files

Single files will not be included in the report. Instead, their values such as "Size" and "Allocated" will be aggregated into a special node "[Files]".

Include single files in export

Single files will be listed in the report. This may result in very large reports compared to exporting the files in a grouped view (see option above).

Exported Columns

Use the column list to specify which information shall be included in CSV exports. A list of all available columns with their descriptions can be found [here](#)^[43].

Use same columns as in details view

Activate this option if you want to use the same columns that are currently used in the [details view](#)^[40].

Included information

Include summary information

Use this option to specify whether a short summary information, such as the title and date of the report, should be added to the exported file. For CSV exports, this will also define whether or not the name of the columns is included in the export.

Include units in export

If this options is activated, units like "KB", "MB", or "%" will be included in the exported data. Uncheck this option, if you want to export plain values.

Used size unit

The size unit that will be used for the export of CSV files. You can either select a specific unit from Byte to Terabyte, let TreeSize automatically determine the optimal unit, or use the same unit that was last used in the user interface.

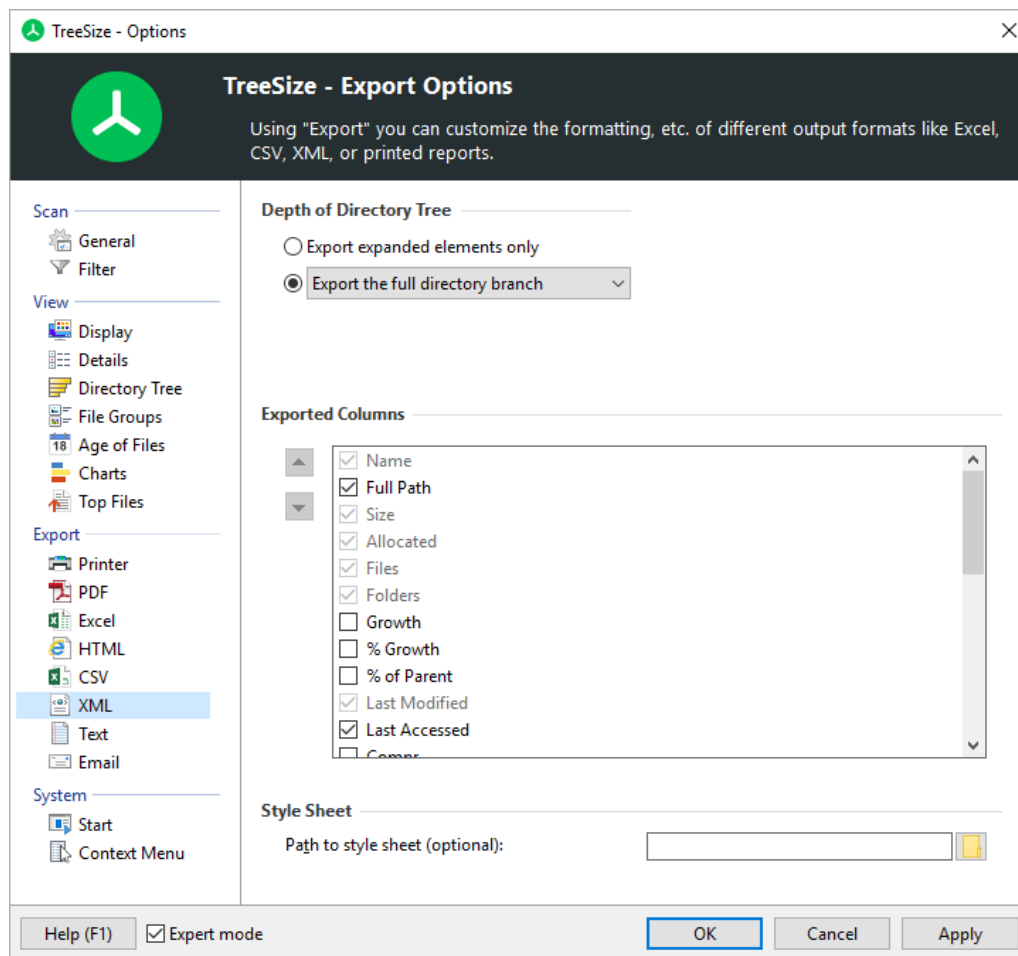
List separator

Separate list columns using:

This options allows you to select which separator should be used for the export of CSV files. By default, the regional settings of the system will be used.

6.8.3.6 XML

Configure the XML file report of TreeSize.



Please note:

- Certain columns cannot be configured for XML reports as these represent required data for the "Load XML report" or "Compare with XML report" features of TreeSize.
- TreeSize ships with an XSLT file that formats the data in the XML file for output in a browser that supports XSLT processing (see option "Style Sheet" below).

Depth of Directory Tree

Export expanded folders only

Only the expanded/visible parts of the [Directory Tree](#)³¹ will be exported.

Export the full directory branch

If this option is selected, the complete [Directory Tree](#)³¹ will be exported.

Exported Columns

Use the column list to specify which information shall be included in XML exports. A list of all available columns with their descriptions can be found [here](#) ⁴³.

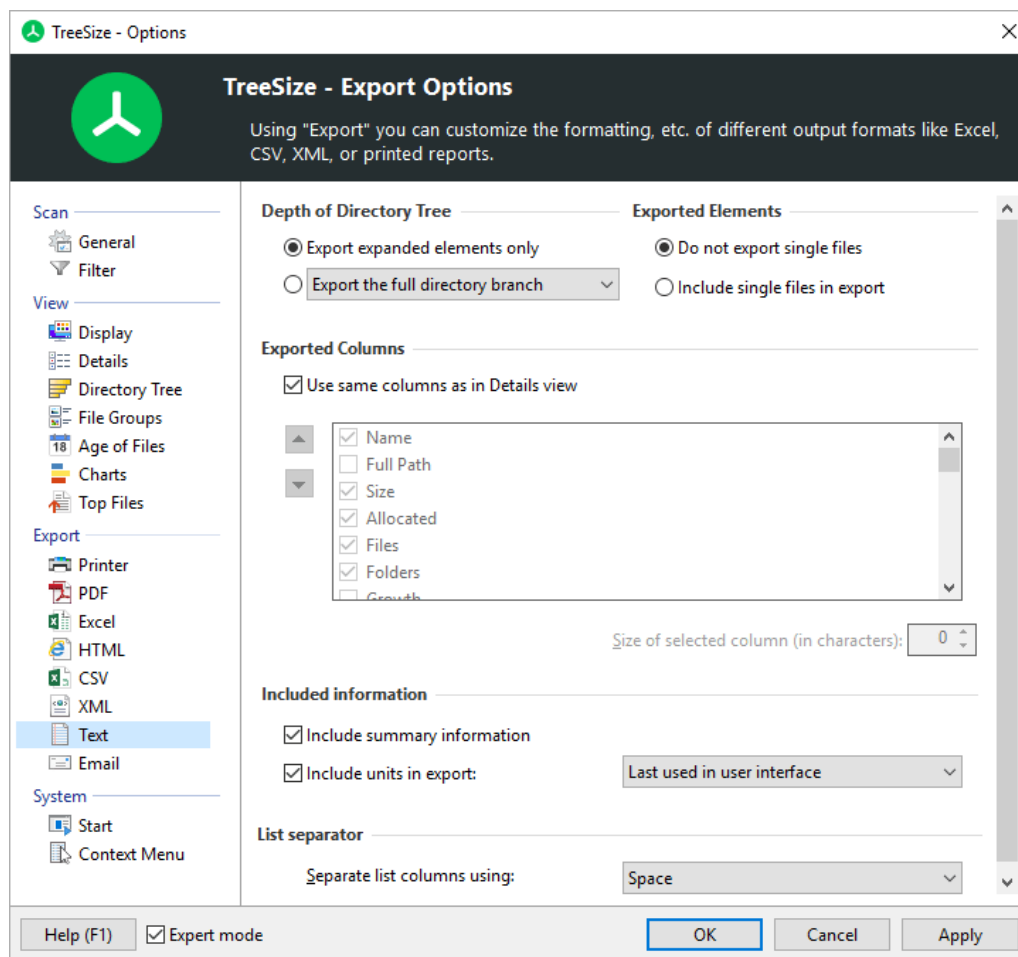
Style Sheet

Path to style sheet (optional)

Define an optional style sheet which will be used to customize the created report.

6.8.3.7 Text

Configure the plain text file report of TreeSize.



Please note:

- The "column" settings of the text export also affect the export to clipboard!

Depth of Directory Tree

Export expanded folders only

Only the expanded/visible parts of the [Directory Tree](#)^[31] will be exported.

Export the full directory branch

If this option is selected, the complete [Directory Tree](#)^[31] will be exported.

Exported Elements

Do not export single files

Single files will not be included in the report. Instead, their values such as "Size" and "Allocated" will be aggregated into a special node "[Files]".

Include single files in export

Use this option to control whether header information (such as the title and date of the report) and the column headers should be added to the exported file.

Exported Columns

Use the column list to specify which information shall be included in text exports. A list of all available columns with their descriptions can be found [here](#)^[43].

Use same columns as in details view

Activate this option if you want to use the same columns that are currently used in the [details view](#)^[40].

Included information

Include summary information

Use this option to specify whether a short summary information, such as the title and date of the report, should be added to the exported file.

Include units in export

If this options is activated, units like "KB", "MB", or "%" will be included in the exported data. Uncheck this option, if you want to export plain values.

Used size unit

The size unit that will be used for the export of text files. You can either select a specific unit from Byte to Terabyte, let TreeSize automatically determine the optimal unit, or use the same unit that was last used in the user interface.

List separator

Separate list columns using:

This options allows you to select which separator should be used for the export of CSV files. By default, the regional settings of the system will be used.

6.8.3.8 Email

Configure email settings for TreeSize.

The screenshot shows the 'TreeSize - Options' dialog box with the 'Email' option selected in the left sidebar. The main area is titled 'TreeSize - Export Options' and contains two sections: 'Email content' and 'Transport'.

Email content section:

- To:** A text input field with placeholder text '<Enter mail recipient (e.g. someone@example.com)>'.
- Subject:** A text input field with the text 'Treesize Report'.
- Format:** A dropdown menu currently set to 'HTML'.

Transport section:

- Use MAPI client:** A radio button that is selected.
- Use SMTP server (required for scheduled tasks):** An unselected radio button.
- SMTP connection settings:**
 - From:** A text input field with placeholder text '<Enter mail sender (e.g. TreeSize@example.com)>'.
 - Server:** A text input field with placeholder text '<Enter Server Name or IP Address>'.
 - Port:** A spin box set to '25' with a note 'Default: 25 (SSL: 465)'.
 - Use secure (SSL) connection:** An unchecked checkbox.
 - This server requires authentication:** An unchecked checkbox.
 - Username:** A text input field.
 - Password:** A text input field.
 - Test Connection:** A button.

At the bottom of the dialog, there is a 'Help (F1)' button, a checked 'Expert mode' checkbox, and 'OK', 'Cancel', and 'Apply' buttons.

Email content

To

The email address the report will be sent to.

Subject

The subject of the email. Supports environment variables such as %DATE%, %TIME% or %USERNAME%.

Format

Choose an email format here.

Transport

Use MAPI client

If this setting is checked, TreeSize will use the local MAPI client (for example Microsoft Outlook) for sending mails.

Use SMTP server

TreeSize will use the specified SMTP server to send email reports. Please make sure to test the connection settings before applying the current options.

Please note that you will have to enter valid SMTP settings in order to make use of email reports in [scheduled scan or search tasks](#)^[144] or all other kinds of automated starts (e.g. batch programs or command line calls) (Professional Edition only).

From

The email address that will be shown as the sender of the report.

Server

The name (DNS) or IP address of the machine hosting the SMTP service through which messages are to be sent.

Port

The port on which the SMTP service specified in the "Server" field is listening for connections.

Use secure (SSL) connection

Indicates that Secure Sockets Layer (SSL) should be used when sending messages via SMTP.

This server requires authentication

Select this option if SMTP service specified by the Server field requires authentication. Passwords will be encrypted before storing them in the TreeSize settings file.

Test Connection

Test the SMTP connection settings. This will send a test email to the email address specified in the "To" field.

Charts and lists to include

Configure the charts and lists that are added to the email export

Check all the different chart types and list types that shall be included in the report that is send via email.

Depth of Directory Tree

Export expanded folders only

Only the expanded/visible parts of the [Directory Tree](#)^[31] will be exported.

Export the full directory branch

If this option is selected, the complete [Directory Tree](#)^[31] will be exported.

Exported Elements

Do not export single files

Single files will not be included in the report. Instead, their values such as "Size" and "Allocated" will be aggregated into a special node "[Files]".

Include single files in export

Single files will be listed in the report. This may result in very large reports compared to exporting the files in a grouped view (see option above).

Exported Columns

Use the column list to specify which information shall be included in email exports. A list of all available columns with their descriptions can be found [here](#)^[43].

Use same columns as in details view

Activate this option if you want to use the same columns that are currently used in the [details view](#)^[40].

Column list

Use the column list to specify which information shall be included in the report for this export type. A list of all available columns with their descriptions can be found [here](#)^[43].

Included information

Include summary information

Use this option to specify whether a short summary information, such as the title and date of the report, should be added to the exported file.

Include units in export

If this options is activated, units like "KB", "MB", or "%" will be included in the exported data. Uncheck this option, if you want to export plain values.

Size unit

The size unit that will be used for the export of Excel files. You can either select a specific unit from Byte to Terabyte, let TreeSize automatically determine the optimal unit, or use the same unit that was last used in the user interface.

Formatting (Expert mode)

Use bold text and colors for reports too

Applies color and formatting options, such as bold text for larger folders, to generated reports as well.

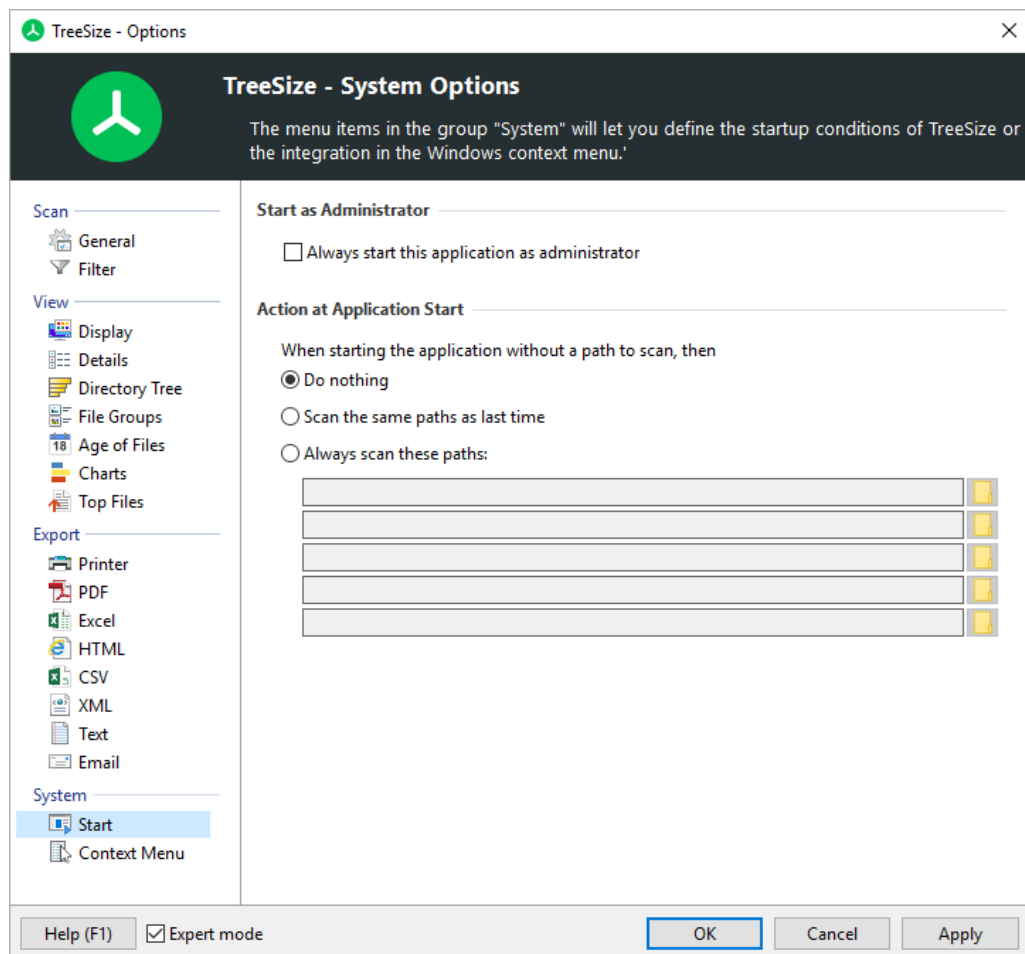
Format file and folder paths as

Chose in which way the paths of files and folders should be formatted in the Excel report. Paths can be formatted either as plain text or as hyperlinks.

6.8.4 System

6.8.4.1 Start

Modify startup settings for TreeSize.



Start As Administrator

Always start this application as administrator

When activated, TreeSize will always start with administrator privileges. This will trigger the UAC (User Access Control) prompt, if UAC is enabled.

Action at Application Start

Do nothing

The application will start with an empty window. A scan can be started using the [path selection drop-down list](#)^[7] or via the corresponding button on the [Home](#)^[22] tab.

Scan the same path(s) as last time

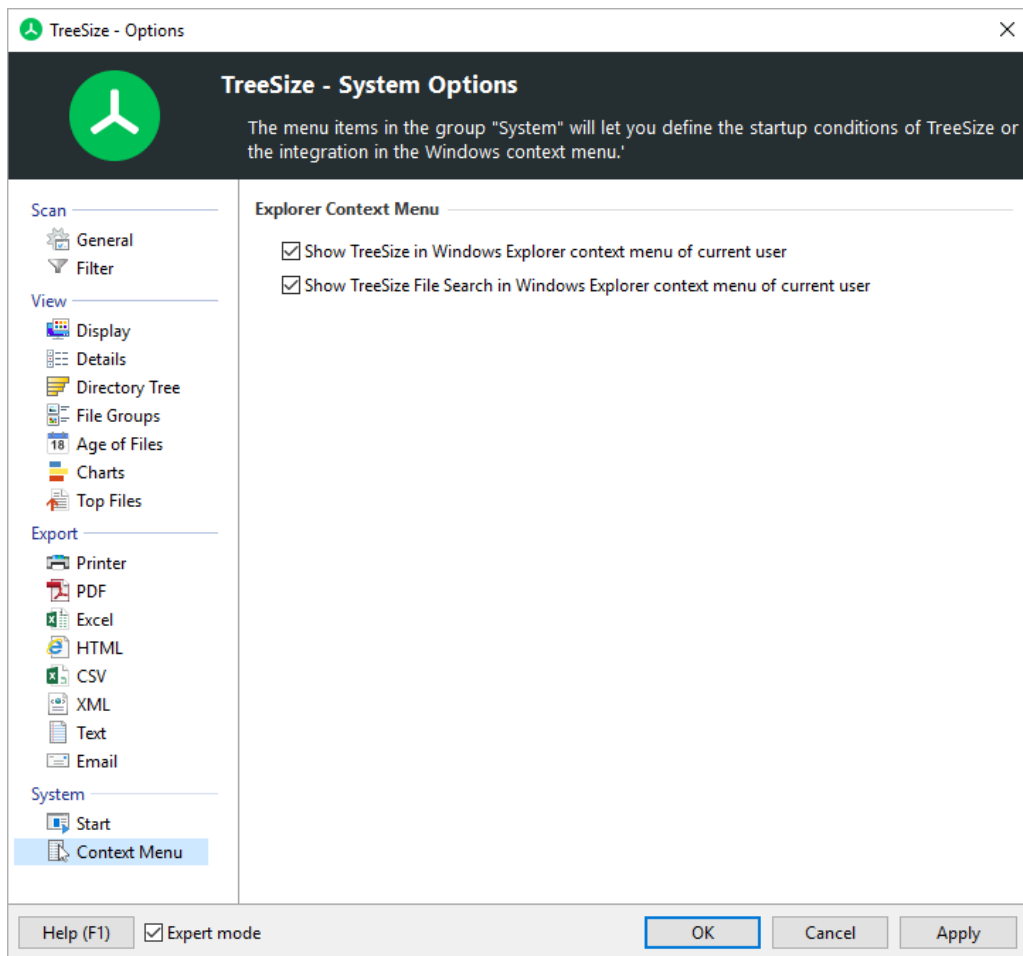
All paths shown in the directory tree the last time TreeSize was closed will be re-scanned once the application is started again.

Always scan these paths

Enter up to five paths to be scanned when the application starts.

6.8.4.2 Context Menu

Configure the integration of the Windows Explorer context menu in TreeSize.



Explorer Context Menu

Show TreeSize in Windows Explorer context menu of current user

Select whether TreeSize should appear in the context menu of folders in the Windows Explorer. Click on the corresponding menu item to start TreeSize and scan the selected folder immediately.

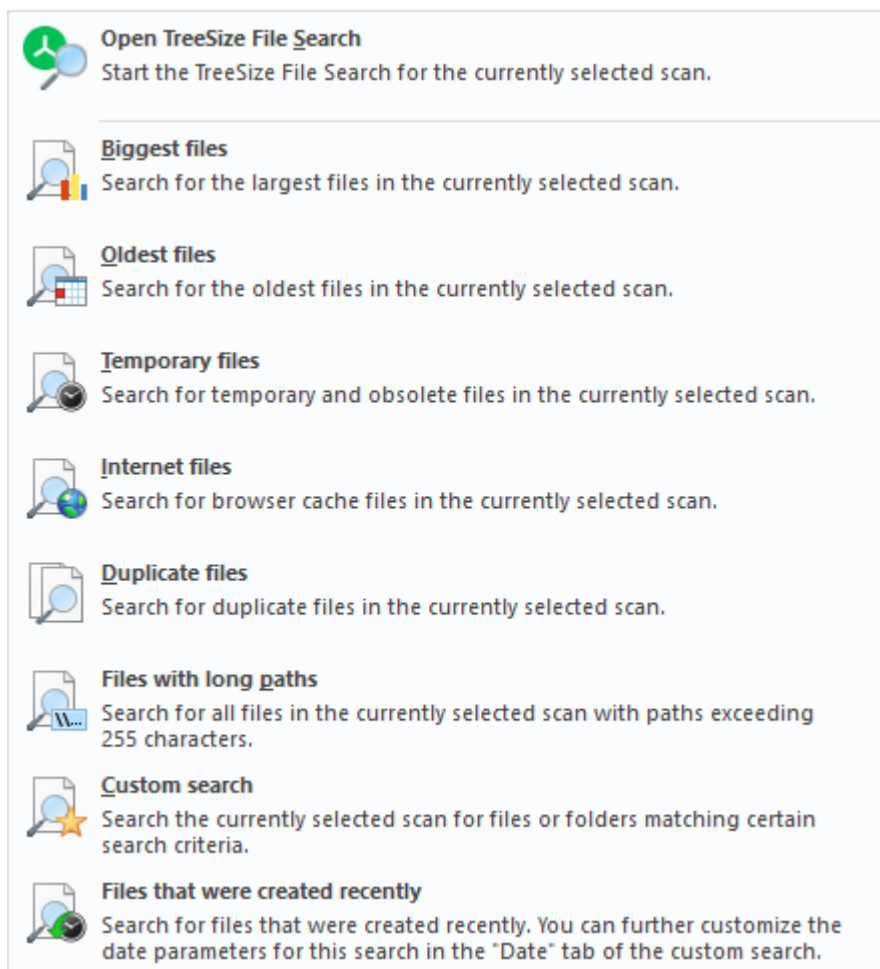
Show TreeSize File Search in Windows Explorer context menu of current user

Select whether the TreeSize File Search should appear in the context menu of folders in the Windows Explorer.

7 Using the TreeSize File Search

The TreeSize File Search offers the ability to search for obsolete files or perform a highly customizable search.

You can open the TreeSize File Search via the Windows "Start" menu or the TreeSize ["Tools"](#) ribbon tab.

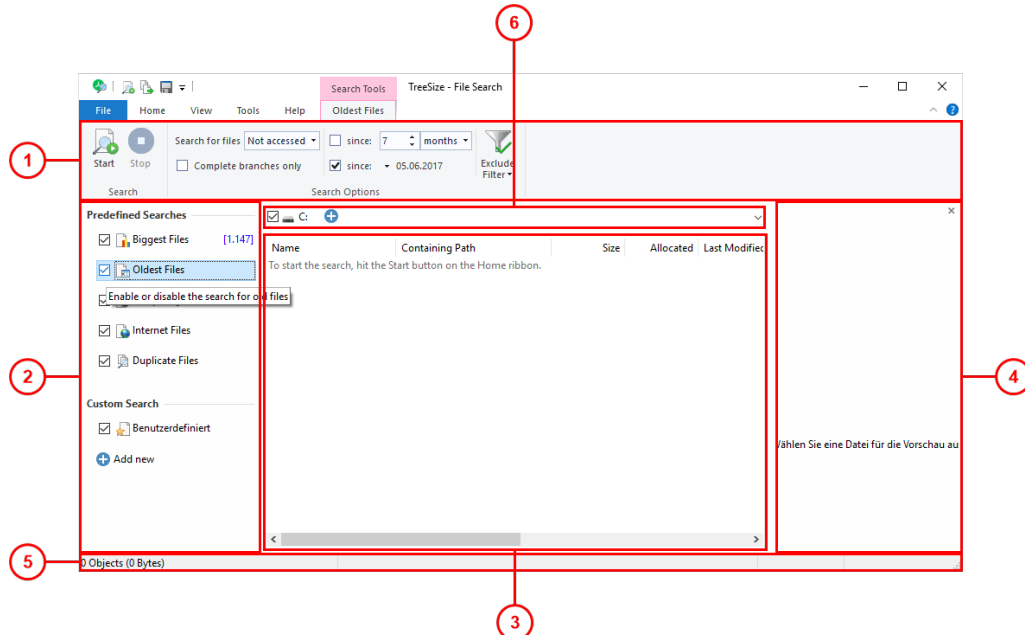


Learn how to use the TreeSize File Search in the following sections:

- [The File Search Window](#)^[99]
- [The Ribbon Bar](#)^[100]
- [The Search Options](#)^[107]
- [Biggest files](#)^[108]
- [Oldest files](#)^[108]
- [Temporary files](#)^[109]
- [Internet files](#)^[111]
- [Duplicate files](#)^[112]
- [Custom search](#)^[119]
- [Move checked files](#)^[128]

7.1 The File Search Window

These are the important elements of the TreeSize File Search window:



1 The [Ribbon Bar](#)^[100] provides access to all commands of the TreeSize File Search. It is divided into logical sections containing commonly used functions and elements (e.g. the "[Home](#)"^[102] tab), or the tabs enabling you to customize the appearance of the search results (e.g. the "[View](#)"^[104] tab). Press the "Start" button to start searching with the currently selected search options in the selected [drives and paths](#)^[107].

2 TreeSize offers the following file search types:

- [Biggest Files](#)^[108]
- [Oldest Files](#)^[108]
- [Temporary Files](#)^[109]
- [Internet Files](#)^[111]
- [Duplicate Files](#)^[112]
- [Custom Search](#)^[119]

Use the check box to activate a certain search type. When a new search is started, all activated searches will be executed, after which the number of results will be displayed. After the search has been completed, select a search type (click on the caption) to show the search results of this search (See **3**).

3 In the center of the window, the result list of the search type you selected at **2** is shown. Files and folders that have been found, can be selected, or checkmarked here.

You can customize the amount of information shown by right-clicking the header of the list. This opens a context menu that provides a selection of predefined columns. Additional columns are available through a selection dialog ("More columns"). TreeSize supports all columns that are available in Windows Explorer.

A detailed description of the different columns can be found [here](#)^[43].

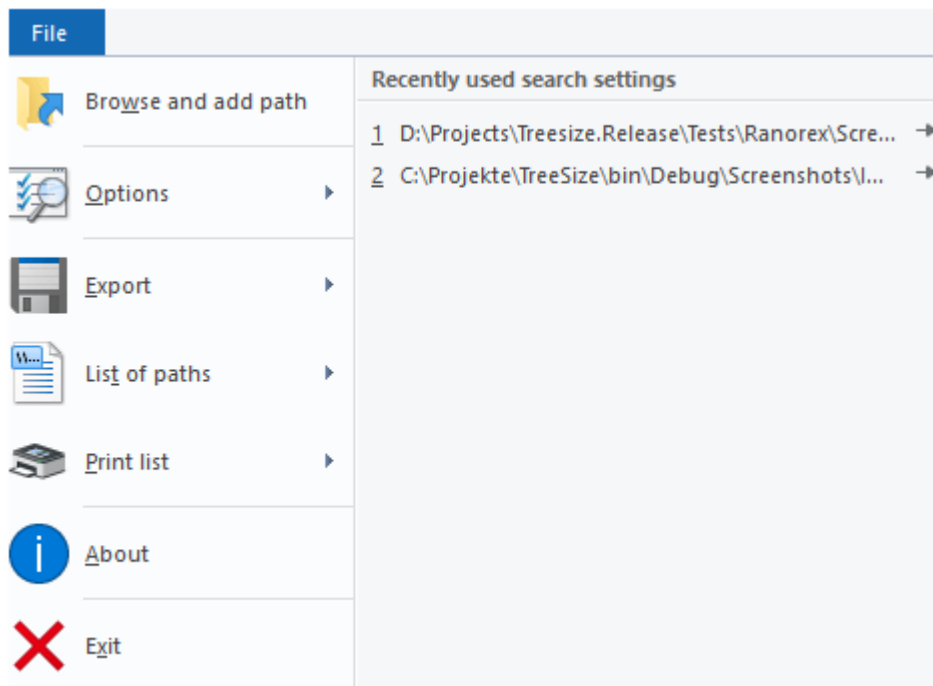
- 4 This preview panel shows detailed information and a thumbnail image of the currently selected element in the shown result list. You can hide this panel at "[View > Details pane](#)"^[105].
- 5 The status bar sums up information regarding the currently shown search results. Potential errors during the search, such as missing permissions, will be shown in this panel as well.
- 6 The [Quick Access Toolbar](#)^[21] is a customizable shortcut to many useful functions of the TreeSize File Search.
- 7 The [drive list panel](#)^[107] shows the currently selected drives and paths that will be used as starting point for the search. By clicking the dropdown button, or the panel itself, you can open the full drive list and select or deselect additional search paths.

7.1.1 The Ribbon Bar

The Ribbon Bar provides access to all commands of the TreeSize File Search. It is divided into the following logical sections, called "Tabs":

- [File](#)^[100] Enables you to select folders to search in and load or save your search results and search options.
- [Home](#)^[102] Contains the most commonly used actions and elements of the TreeSize File Search.
- [View](#)^[104] Contains all actions and elements influencing the general appearance of the search results.
- [Tools](#)^[105] Contains useful functions and settings of the file search.
- [Help](#)^[106] Provides common help features, version information, and management functions for your product license

File



Browse and add path

Shows a dialog which lets you select a directory. The directory will be added to the [list of drives and paths TreeSize will search in](#)^[107].

Please note: Use "Home > Search paths" to see the complete list of searched drives and paths.

Search settings

Allows to Save the current search options to an XML file, load a previously exported options file, or to reset the current settings to their factory default.

Export

Saves the results of the latest search to a configurable file format.

Available file formats are "Text files (.txt)", "CSV files (.csv)", "Microsoft Excel (.xlsx)", "Rich Text Format (.rtf)", "HTML (.html)", "PDF (.pdf)", and email.

List of paths

Exports a list of the full paths of your current search results ("Export path list") or import a list ("Import path list") in the format Text or CSV (mandatory).

Print list

Prints the currently visible result list or configure printer settings.

Options

Opens the [options dialog](#)^[60], which allows to change the current search settings.

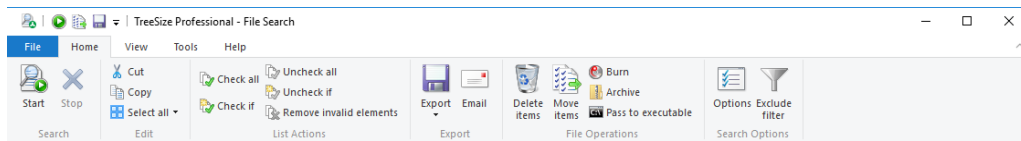
About

Shows version number and contact information.

Exit

Exits the TreeSize File Search.

Home



Search

Start

Starts the file search.

Stop

Stops the file search.

Edit

Cut

Removes the selected items and copies them to the clipboard.

Copy

Copies the selected files and folders to the clipboard. To insert them in a new location, use the "Paste" command.

Select all

Selects all items in the list.

A drop-down menu provides access to the additional button "**Invert selection**", which will invert the selection state of all search results.

List Actions

Check all

Checks all items in the active result list.

Check if

Checks all items for which the full path matches certain patterns in the currently visible result list. You can configure the patterns in a new window.

Please note: The check state of other items will not be changed by this function.

Invert checkstates

Checked items will be unchecked and vice versa.

Uncheck all

Unchecks all items in the active result list.

Uncheck if

Unchecks all items for which the full path matches certain patterns in the currently visible result list. You can configure the patterns in a new window.

Please note: The check state of other items will not be changed by this function.

Remove invalid elements

Through changes on the file system, such as the manual deletion of files via Windows Explorer, it may be possible that previously found duplicate search results have become invalid. This function checks all

currently shown elements and removes those that cannot be found on the file system anymore.

Export

Export

Saves the results of the latest search to a configurable file format.

Available file formats are "Text files (.txt)", "CSV files (.csv)", "Microsoft Excel (.xlsx)", "Rich Text Format (.rtf)", and "HTML (.html)", and "PDF (.pdf)".

You can also export a list of paths for the current search results. This list can be imported back into the file search at a later point in time, without having to perform a potentially long running search again. This also works for duplicate search, which will be exported including their group structure, if the option "General > Export > Export path list > [Include duplicate groups](#)^[140]" is enabled.

Email

Sends an email that contains the current search results.

File Operations

Delete items

Deletes all checked search results.

See "[Move checked files](#)^[128]".

Move items

Moves all checked search results to a destination of your choice.

See "[Move checked files](#)^[128]".

Archive

Archives all checked search results in a ZIP file.

See "[Move checked files](#)^[128]".

Pass to executable

Passes the full path of all checked search results via command line to an executable of your choice.

See "[Move checked files](#)^[128]".

Rename items

Opens the [renamer dialog](#)^[132], which allows to rename all checked items simultaneously, using different rulesets which determine the new name of the files and folders.

Search Options

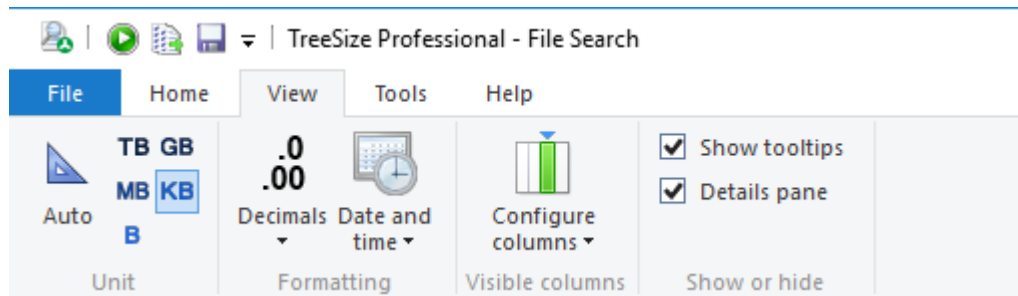
Options

Opens the [options dialog](#)^[60], which allows to change the current search settings.

Customize filter

Allows to customize the set of [filters](#)^[136] that can be applied globally, to any of the search types.

View



Unit

Select the size unit, in which file sizes will be displayed:

Auto

Automatically selects the optimal unit.

TB

File sizes are displayed in Terabytes.

GB

File sizes are displayed in Gigabytes.

MB

File sizes are displayed in Megabytes.

KB

File sizes are displayed in Kilobytes.

B

File sizes are displayed in Bytes.

Formatting

Decimals

Determines the number of displayed decimals places.

Date and time

Chose the date format that is used in the TreeSize file search for columns like "Last Access", "Last Change", or "Creation Date" here. Available formats are date, date+time (without seconds), and date+time (with seconds).

Visible columns

Configure columns

Set the visible columns in the search result list.

This menu provides a large set of columns that can be enabled or disabled, as well as the option to activate one of the "additional columns" that are also available in Windows Explorer, such as "number of pages", for MS Word documents, width and height of pictures, and many more.

Please note: Before exporting scan results we recommend deactivating all columns you do not

necessarily need in your export. This will increase the performance of the export and reduce the size of the export files.

Show or hide

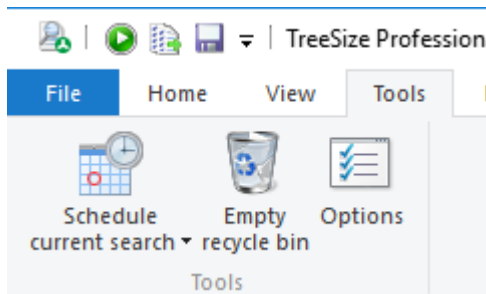
Show tooltips

Enables long tool tips in the search result lists, showing detailed information about the file or directory your mouse cursor hovers over.

Preview pane

Toggles a panel to the right of the result list, showing a preview of the first currently selected file or directory.

Tools



Tools

Options

Opens the [options dialog](#)^[60], which allows to change the current search settings.

Schedule current search

Opens a dialog enabling you to create a scheduled Windows task for the current search options.

The drop-down menu provides access to the additional button "**Manage scheduled tasks**", which allows you to edit previously created TreeSize tasks.

See "[Schedule Dialog](#)"^[145].

Start as Administrator

Restarts the TreeSize File Search and requests admin privileges.

Please note: This button is available only if TreeSize was started without administrator privileges.

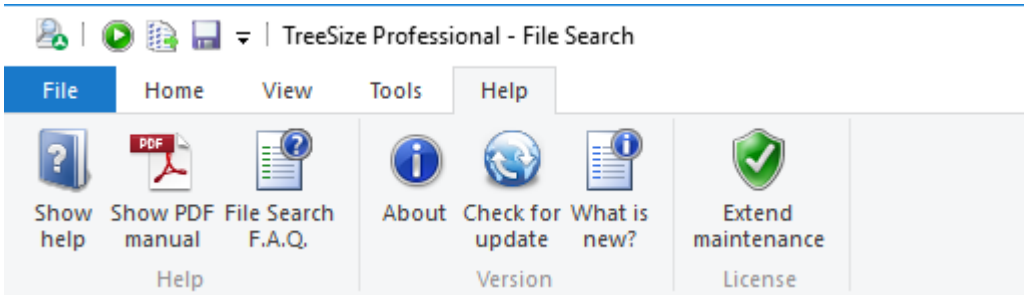
Create portable installation

Creates a portable instance of TreeSize on a removable device

Empty recycle bin

Deletes all items in the recycle bin to free up disk space.

Help



Help

Show help	Opens the "File Search"-specific help file.
Show PDF manual	Open the product manual as PDF (optimized for printing).
File Search F.A.Q.	Opens the "File Search"-specific F.A.Q. section in the help file.

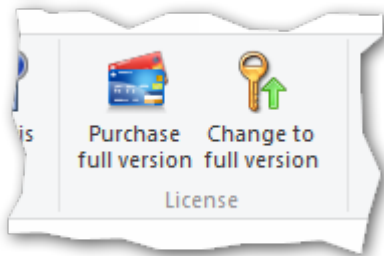
Version

About	Provides information about TreeSize.
Check for Update	Checks for a newer version of TreeSize.
What is new?	Shows the changes that were introduced with each new version of TreeSize.

License

Extend maintenance	Extends the maintenance period. Updates and support are free within the selected maintenance period.
--------------------	--

Please Note: For the trial version of TreeSize, the Ribbon group "License" contains different controls:



Purchase full version	Navigates to the JAM Software website and shows a list of all available license models.
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Change to full version

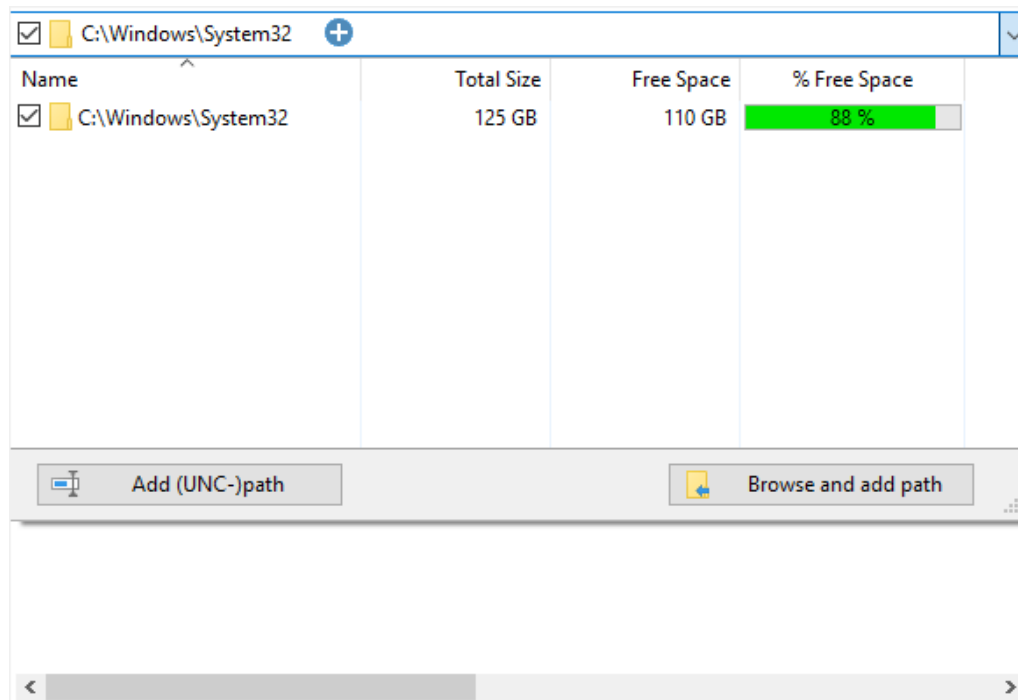
Helps you switch to the full version after purchasing the software.

7.1.2 Defining search paths

Drives and Paths to search

The expandable drive overview enables you to define the drives and paths to search in. In its non-expanded state, it shows all searchable drives and paths that are selected for the current search. Additional paths can be browsed for, by using the plus symbol.

When expanded, the panel shows a list of all available drives, as well as the previously selected search paths, in a drop-down menu. Use the check boxes in front of each drive to select which file system branches should be searched by the file search. You can add additional paths and network drives using the buttons below the list. The first button will enable you to type in a path, the second one will open a folder browser dialog.

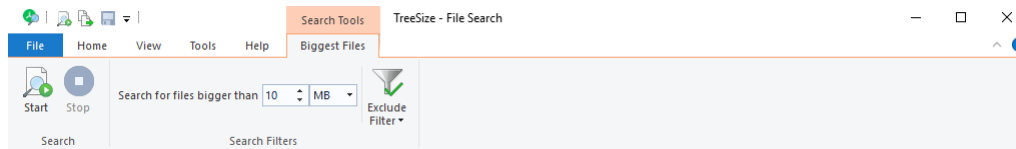


The file search supports the same [scan targets](#)^[30] as the main module of TreeSize, including WebDAV, Amazon S3, and SSH.

Hint: You can search entire servers or PCs by using their UNC name like \\SERVER. You can search your entire domain by using its UNC name, e.g. \\DOMAIN. You can even search your entire network by choosing the network neighborhood of Windows in the directory browser appearing after pressing *Browse and Add Path*. TreeSize automatically browses for PCs and all shares on them (including hidden shares) and performs the search on all shares it finds.

7.2 Biggest files

Context tab: Biggest Files



Enables you to search for the biggest files in the selected [drives and paths](#)^[107]. You can specify a minimum file size. All files larger than this value will be listed in the search results.

Search for files bigger than...

Specify the minimum file size.

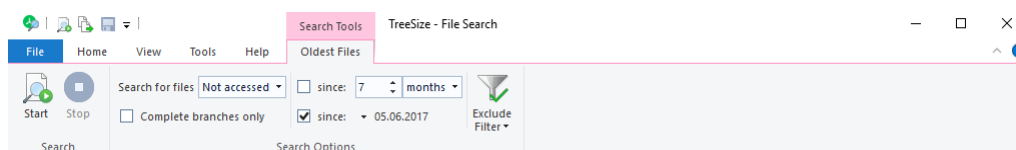
Exclude Filter

Allows to activate, deactivate or customize the [global exclude filters](#)^[136] for this search.

Like in all searches, you can move all checked files in the result list to a position in the file system that you can specify by using the [Move Items](#)^[128] function. The main module of TreeSize is also showing a list of the [100 largest files](#)^[51].

7.3 Oldest files

Context tab: Oldest Files



This search type detects files or complete directory branches in the chosen [drives and paths](#)^[107] that have not been changed or accessed since a certain date.

Search for files not [accessed / changed]

Select which time stamp should be checked: the last access date or the last change date.

since

Define here for how long a file must have been not accessed / changed to be shown in the result list.

You can either use a certain date or a number of days.

Return complete folders only

Activate this option to show entire folders as search results. In this case only folders will be listed for which **all** included files and sub folders in any depth were not accessed / changed.

This enables you to identify branches of the file system that are not in use anymore.

Exclude Filter

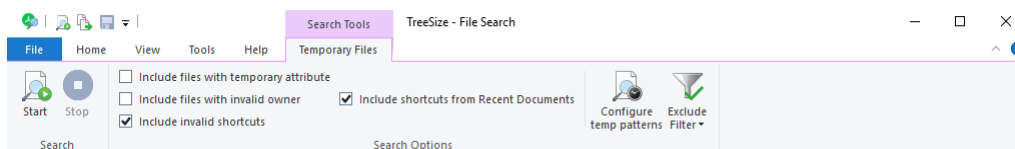
Allows to activate, deactivate or customize the [global exclude filters](#)^[136] for this search.

Please note: The [Custom Search](#)^[119] offers more sophisticated filter options for the timestamps of files.

Like in all searches, you can move all checked files in the result list to a position in the file system that you can specify by using the [Move Items](#)^[128] function.

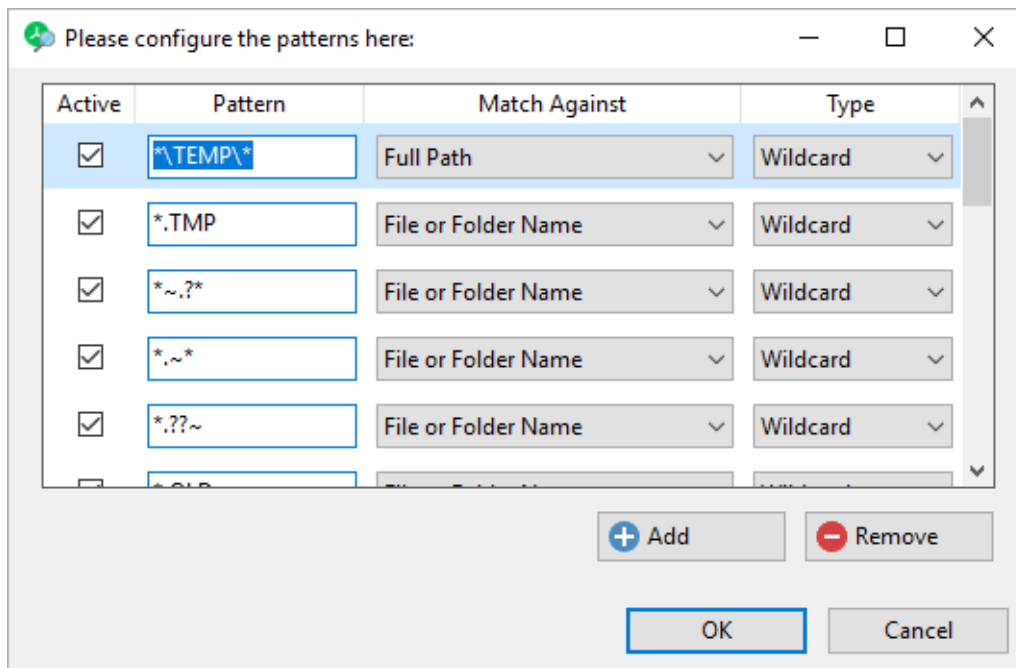
7.4 Temporary files

Context tab: Temporary Files



Allows you to search for temporary files on the selected [drives and paths](#)^[107].

TreeSize defines temporary files as files matching certain patterns which are specific for temporary files (e.g. "*.tmp"), and files with certain other properties (e.g. temporary file attribute is set). If you want to customize the search settings that are used for this search, click **"Configure temp patterns"**:



Patterns

The main part of the temporary file search is based on typical filename patterns. You can customize these patterns using the button **"Configure temp patterns"** in the ribbon menu. You may change or delete existing patterns as well as add new patterns. Using the check boxes on the left, you can deactivate certain patterns without deleting them.

Allowed wildcards for pattern building:

- * Replaces none or any number of alphanumeric characters.
- ? Replaces exactly one alphanumeric character.

Other criteria which are common for temporary files (Selectable via "Additional Settings"):

Include files with temporary attribute

Applications that create a temporary file may inform the operating system with a special flag about this fact. This flag is represented in the ["Attributes"](#) column of TreeSize and the Windows Explorer ("T" = temporary file). If this checkbox is activated, TreeSize will include such files in the search results.

Include files that do not belong to a valid account (slow)

If a Windows account is deleted, files belonging to this account are not deleted

automatically and may keep occupying space on the hard disks.

If this checkbox is activated, TreeSize will include such files in the search results.

Please note: Since it is necessary to query the owner of each file on the searched disks, activating this option will slow down the scanning process.

Include invalid shortcuts

If this checkbox is activated, TreeSize will check for .LNK and .PIF files, if the destination path exists. If this is not the case, such a file will be included in the search results.

Include Shortcuts from Recent Documents

If activated, TreeSize will check for shortcuts from the recent documents folder and list them in the search results.

Configure temp patterns

Shows a list of patterns that are used to determine which files are considered "temporary". The list can be fully customized.

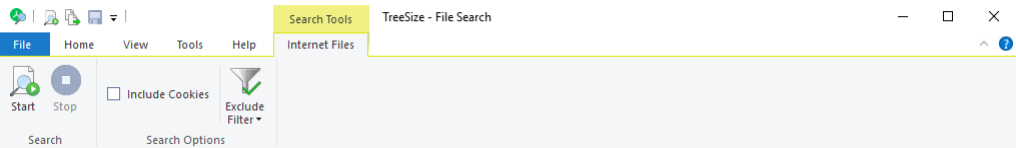
Exclude Filter

Allows to activate, deactivate or customize the [global exclude filters](#)^[136] for this search.

Like in all searches, you can move all checked files in the result list to a position in the file system that you can specify by using the [Move Items](#)^[128] function.

7.5 Internet files

Context tab: Internet Files



This search type enables you to search for temporary internet files like the files in the cache of the browsers Internet Explorer, Firefox, Chrome, Opera, and Netscape Navigator.

Include cookies Activate this option to search and list cookie files.

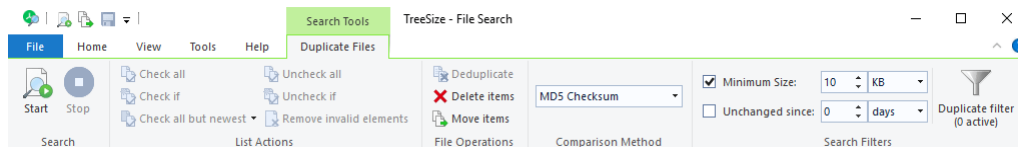
Exclude Filter Allows to activate, deactivate or customize the [global exclude filters](#)^[136] for this search.

Hint: The search for temporary internet files can be automated using the [command line option](#)^[156] /SEARCH:Internet.

Like in all searches, you can move all checked files in the result list to a position in the file system that you can specify by using the [Move Items](#)^[128] function.

7.6 Duplicate files

Context tab: Duplicate Files



Searches for duplicate files on the selected [drives or shares](#)^[107].

In this context, duplicate files are files which seem to exist more than once. Such redundant files increase the allocated space of your disks unnecessarily.

A detailed [step by step](#) example of how to use the duplicate search can be found [here](#)^[117].

Check all Checks all items in the active result list.

Check if Checks all items for which the full path matches certain patterns in the currently visible result list. You can configure the patterns in a new window.

Please note: The check state of other items will not be changed by this function.

Check all but newest Check-marks all files of the selected duplicates, except the newest file of each group.

The drop-down menu provides access to additional options that allow to select which duplicate files should be checked. The dropdown also includes the option ["Ensure one unchecked file per group"](#)^[116].

Uncheck all	Unchecks all items in the active result list.
Uncheck if	<p>Unchecks all items for which the full path matches certain patterns in the currently visible result list. You can configure the patterns in a new window.</p> <p>Please note: The check state of other items will not be changed by this function.</p>
Remove invalid elements	Through changes on the file system, such as the manual deletion of files via Windows Explorer, it may be possible that previously found duplicate search results have become invalid. This function checks all currently shown elements and removes those that cannot be found on the file system anymore.
Deduplicate	<p>This function will replace duplicate files with NTFS hardlinks^[174].</p> <p>Please find a detailed description of this function below^[115].</p>
Delete items	<p>Delete all checked search results.</p> <p>See "Move checked files"^[128].</p>
Move items	<p>Move all checked search results to a destination of your choice.</p> <p>See "Move checked files"^[128].</p>

Comparison method:

Defines which criteria should be used to identify files as duplicates. Here is a list of the available strategies:

Size, Name and Date	<p>Select this option to identify duplicate files by looking for equal names, sizes and last change dates.</p> <p>This is much faster than using check sums to indicate duplicates, but it is also less accurate.</p>
MD5 Checksum	<p>When using MD5 checksums, a so called hash value is calculated based on the contents of each file. Files with the same content will have the same hash value, files with different content will almost certainly have different values.</p>

	<p>Empty files are ignored, since there is no content to compare.</p> <p>This is more accurate than comparing files by their name, size and date but it is also much slower.</p>
SHA256 Checksum	<p>This search option works like the MD5 checksum mechanism, but uses the SHA256 algorithm instead of MD5.</p> <p>While it is very unlikely that the MD5 hash algorithm produces the same hash value for different files, the SHA256 algorithm further reduces the statistical risk of such hash collisions. However, the SHA256 algorithm is significantly slower than MD5.</p>
Name only	<p>Select this option to find all files with equal file names.</p> <p>This is not really a strategy to identify true duplicate files, but this compare type may be helpful when you are searching for certain redundancies or undesired copies (e.g. documents which have been copied and modified locally).</p>
Name without Extension	<p>Select this option to detect files with equal names, without regarding the file extension.</p> <p>This can be interesting in case you are searching for duplicated backup files or e.g. raw-data and compact image or video files ("MyPhoto.bmp" - "MyPhoto.png").</p>
Name and Size	<p>Select this option to identify duplicate files by looking for equal names and sizes.</p> <p>Equal to the very first compare criteria, but without regarding the "last modified" time stamp of the files.</p> <p>This is helpful in case files had been moved from one location to another, which might modify this time stamp.</p>
Size only	<p>Select this option to find all files with equal size.</p>

This is not really a strategy to identify true duplicate files, but this compare type may be helpful when you are searching for certain redundancies or undesired copies (e.g. Copied MP3 or Video files).

Search Filters:

Additional options to customize the duplicate file search:

Minimum Size	<p>Defines the minimum size for files which are subjected to the duplicates search.</p> <p>Please note: Using a minimum size will reduce the number of files to compare. This will increase the speed of the search, especially when comparing by checksums.</p>
Unchanged since	<p>Restricts the duplicates search to files that haven't been changed recently. Similar to the size filter, this can help to further optimize the search by reducing the amount of files that have to be compared.</p>
Ignore NTFS hardlinks	<p>If checked, hardlinks will not be regarded as duplicate files. You can find this setting in the options dialog under "Duplicate File Search" > "Filter"^[144].</p> <p>Please note: NTFS hardlinks^[174] do not allocate any space so you will not free up disk space by deleting them. Also, TreeSize uses hardlinks for the Deduplication^[115].</p>
Duplicate filter	<p>This option allows you to restrict the duplicate search to a specific preselection of files. Depending on whether you define an exclude, or include filter, all files that match these filter patterns^[143] will be excluded from, or restricted to in the duplicate search.</p> <p>By using this option, you can prevent listing files of certain directories (e.g. your local system directories) as duplicates. Additionally, this option will reduce the number of files to compare and thus lead to a performance increase.</p>

Deduplicate:

Use this button to replace all but one checked duplicate files by NTFS hardlinks to one file. This will reduce the disk space blocked by your duplicate files (See: [NTFS hardlinks](#)^[174]). However, this will not influence the disk space shown in the "properties" dialog of the Windows Explorer (See: [Deduplication FAQ](#)^[15]). If

you check only one file of a group, this file is replaced by a link to the "newest" (latest last change date) unchecked file of this group.

Please note: You cannot use hardlinks to replace files located on different hard drives.

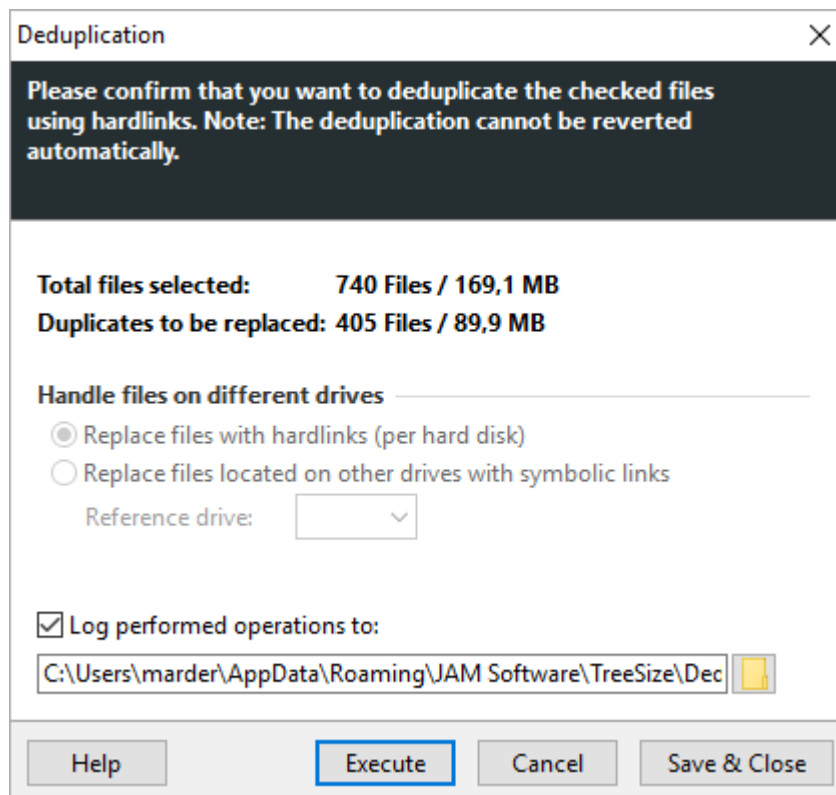
In the configuration window you can select a log file to log the performed replacements to. You can also define how TreeSize will handle files located on different hard disks. You can either replace files located on the same hard disk with hardlinks separately or simply select a reference drive and replace all files located on other hard disks with [symbolic links](#)¹⁷³. Please note that in case the permission to create symbolic links can not be granted, a Windows shortcut (.LNK file) will be created instead as fallback.

The context menu of the duplicate files list offers a feature named "Replace duplicates by hardlinks". This function works just like the "Deduplicate" function, but will handle all selected files instead of checked files.

To use deduplication with hardlinks you need these **NTFS permissions** in all affected folders: Read permissions, write permissions, create files, delete files

Important: Please note that TreeSize does not offer the functionality to "undo" a deduplication!

All hardlinks pointing to the same file share the same "Security Description" (access permissions). Deduplication will apply a unified set of permissions to the one physical remaining file. Undoing a deduplication manually is very difficult.



Ensure one unchecked file per group:

Activate this option, if you want to ensure that one file per duplicate group remains unchecked. This can be useful when using a custom selection

mechanism, such as "Check if", to ensure that at least one of the duplicate files will not be included in a move or delete operation.

7.7 How to set up a duplicate search

The duplicate search is part of the TreeSize File Search, which can be started from the "[Home](#)^[22]" tab within the main module, or via the separate shortcut in your Windows Start menu.

Step 1: Activate the duplicate search and select a search path:

To set up a duplicates search, first enable the checkbox "Duplicate Files" on the left side. Use the panel above the search result list, to select the drive or path that you want to search. You can find additional information about how to set up a search path in [this](#)^[107] chapter. It is also possible to search for duplicates across multiple drives or paths.

Step 2: Select a comparison method and minimum file size:

The next step is to select the mechanism that should be used to compare files with each other. You can compare the files by their Name only, or a combination of Name, Size and Date. The most accurate method, however, is the checksum. A duplicate search that uses file checksums is slower, but will be much more accurate, since the actual content of the files is used for the calculation.

It is also recommended to define a minimum size for the search, so that small files can be skipped quickly. Smaller files do not contribute much to the total size on the drive, so their removal would not gain much space. Both these options can be changed in the contextual ribbon "[Duplicate Files](#)^[112]".

Step 3: Run the search:

Once you have configured all necessary parameters, you can run the search and analyze the results. Each occurrence of a duplicate is arranged under a group in the result list.

The following screenshot shows an example configuration as mentioned above and shows the results of the search:

C:\Windows\System32					
<input type="checkbox"/> Name	Containing Path	Size	Allocated	Last Modified	
▼ <input type="checkbox"/> FXSRES.DLL	2 Files	13,4 MB	13,4 MB	15.09.20	^
<input type="checkbox"/> FXSRES.DLL	C:\Windows\System32\spool...	6,7 MB	6,7 MB	15.09.201	
<input type="checkbox"/> FXSRES.DLL	C:\Windows\System32\Driver...	6,7 MB	6,7 MB	15.09.201	
▼ <input type="checkbox"/> {093539f1-b...	2 Files	10,0 MB	10,0 MB	22.02.20	
<input type="checkbox"/> {093539f1-...	C:\Windows\System32\confi...	5,0 MB	5,0 MB	22.02.201	
<input type="checkbox"/> {093539f1-...	C:\Windows\System32\confi...	5,0 MB	5,0 MB	22.02.201	
▼ <input type="checkbox"/> PrintConfig.dll	2 Files	6,7 MB	6,8 MB	25.03.20	
<input type="checkbox"/> PrintConfi...	C:\Windows\System32\Driver...	3,4 MB	3,4 MB	25.03.201	
<input type="checkbox"/> PrintConfi...	C:\Windows\System32\spool...	3,4 MB	3,4 MB	25.03.201	
▼ <input type="checkbox"/> evbda.sys	2 Files	6,5 MB	6,5 MB	15.09.20	
<input type="checkbox"/> evbda.sys	C:\Windows\System32\drivers\	3,3 MB	3,3 MB	15.09.201	
<input type="checkbox"/> evbda.sys	C:\Windows\System32\Driver...	3,3 MB	3,3 MB	15.09.201	
▼ <input type="checkbox"/> PrintConfig.dll	2 Files	5,5 MB	5,5 MB	25.03.20	
<input type="checkbox"/> PrintConfi...	C:\Windows\System32\Driver...	2,7 MB	2,7 MB	25.03.201	
<input type="checkbox"/> PrintConfi...	C:\Windows\System32\spool...	2,7 MB	2,7 MB	25.03.201	
▼ <input type="checkbox"/> cht4vx64.sys	2 Files	3,6 MB	3,6 MB	15.09.20	▼

Step 4: Analyze the results and perform the cleanup operation:

Deduplicate:

The easiest way to gain disk space with the duplicate search is the [deduplication](#)^[115] feature. Just check the files that you want to deduplicate and select "Deduplicate" from the ribbon menu. TreeSize will replace all but the newest file with [NTFS hardlinks](#)^[174]. After the deduplication, the copies will no longer allocate space on the drive.

Delete/Archive:

Another way to free up space is to delete the duplicate files from the disk. In contrast to the deduplication, the duplicate files will be removed from disk completely, there will be no leftover link to the original data. This also requires you to manually select the files that should be removed. However, TreeSize offers a variety of functions that helps you select only the duplicate files, so that one "original" file will always remain.

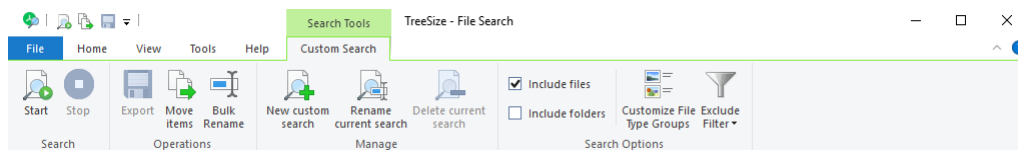
In the ribbon menu for the duplicate search, you can find the category "List actions", which provides functionality for checking "All but the ..." newest, oldest, first or last file of each duplicate group. This allows you to select all files of a duplicate group but leave one file unchecked (the one file that will not be deleted). If you want to make a more customized selection, such as "only files from drive G:", you can use the "Check if" dialog to create a custom selection pattern. To this end, it may also be useful to select "Ensure one unchecked file per group". If this option is enabled, TreeSize will ensure that one file per duplicate group remains unchecked under all circumstances. This prevents cases, where all files of a group were checked accidentally, so that no original file would be left over, after the delete operation.

After checking the files that should be deleted, click "Delete items" in the ribbon menu to trigger the [deletion dialog](#)^[128], where you can select what operation should be performed. You can either delete the files, or move them to a different location. In both cases, you can create a log file of the operation, which provides a summary of the operation and allows you to verify the results.

Finally, click "Execute" to start the operation.

7.8 Custom search

Context tab: Custom Search



The custom search is more customizable than any of the predefined searches. It can combine different filter patterns with date, size, or even attribute filters.

You can add multiple custom searches and assign different search criteria to each of them. You can, for instance, create a custom search for audio files that were are larger than a certain threshold, and another custom search for files with paths that exceed a length of 255 characters. Each of these searches can be activated and deactivated separately, so you can store a set of custom searches where each serves a different purpose. The ribbon menu can be used to create, rename, or delete custom searches, or to set up the general parameters of the current search:

- | | |
|------------------------------|--|
| Export | Saves the results of the latest search to a configurable file format, such as "Text files (.txt)", "CSV files (.csv)", "Microsoft Excel (.xlsx)", "Rich Text Format (.rtf)", and "HTML (.html)", and "PDF (.pdf)". |
| Move items | Moves all checked search results to a destination of your choice.
See " Move checked files " ^[128] . |
| Rename items | Opens the renamer dialog ^[132] , which allows to rename all checked items simultaneously, using different rulesets which determine the new name of the files and folders. |
| New Custom Search | Creates a new custom search and adds it to the list of available searches. |
| Rename current search | Allows to rename the current custom search. A descriptive name may help distinguish between multiple searches, where each serves a different purpose. |

- Delete current search** Removes the currently selected custom search.
- Include Files/Folders** Determines whether the current search should search for files, folders, or both.
- Customize File Type Groups** Opens the options dialog and navigates to the "[File Groups](#)"^[142] options page. Here, you can modify the different file groups and which file types they should contain.
- Exclude Filter** Allows to activate, deactivate or customize the [global exclude filters](#)^[136] for this search.

The search allows you to configure your own search operation using a large variety of search criteria across the different option tabs.

Active	Action	Pattern	Match Against	Type	Delete	Add
<input checked="" type="checkbox"/>	Include		File or Folder Name	Wildcard		

The search can be configured on the following tabs:



- [Filter Patterns](#)^[120] (search for file name, file type, owner, or file content)
- [Date](#)^[124] (search for file dates)
- [Size / Attributes](#)^[125] (search for file sizes and attributes)
- [Other Filters](#)^[127] (search with other filters)

Please note: The tabs of the custom search that have filters set (= influence the search result) are marked by a green checkbox shown left of the tab's caption.

Like in all searches, you can move all checked files in the result list to a position in the file system that you specified via the [Move Items](#)^[128] function.

7.8.1 Search for file name, owner, or file content

This tab enables you to define include or exclude patterns for files or folders which should be found by the custom search.

Filter Patterns		Date	Size / Attributes	Other Filters		
Active	Action	Pattern	Match Against	Type	Delete	Add
<input checked="" type="checkbox"/>	Include ▾	<input type="text"/>	File or Folder Name ▾	Wildcard ▾		

How to define a filter

To define a new filter, please follow these steps:

1. Click the "+" button in the **"Add"** column. A entry will be created in the filters list for the new filter.
2. Decide whether this filter shall operate as an **exclude** or **include** filter using the **"Action"** selector of the newly created entry. If, for example, an exclude filter for the pattern "*.exe" is set, TreeSize will not show any files with the extension ".exe". An include filter, on the other hand, will make TreeSize show only items that match this pattern: an include filter of "*.exe" would result in showing only files that have the extension ".exe".
3. Define the actual pattern. You can either use simple **wildcard pattern** such as "*.exe", **regular expression** patterns such as ".+\\.exe\$" or patterns that match the **whole name** like "notepad.exe". Please make sure that you select the pattern type you want to use in the **"Type"** column.
4. The **"Match Against"** column is used to specify the element/attribute against which the pattern is compared. Patterns can be matched against the file or folder names, (full) paths, owners, name the parent folder, name of any parent folder, or any arbitrary meta data that the file provides. You can use the owner filter, for example, to include or exclude certain file owners from the TreeSize search results, supported are usernames and SIDs. With the full paths or folder name filter you can include or exclude complete directory branches matching a certain pattern (e.g. "**\\Program Files*"). File or folder name should be used when you intent to include or exclude certain file extensions (e.g. "*.tmp"), like described in step 2).

Search for Meta data:

In addition to the predefined set of attributes that can be used to search for files, TreeSize allows to use any of the available meta data, such as "Last saved by" for office documents, or "tags" for JPG and Office files. Select **"Match Against > Other"** to open a selection dialog with all available meta data .

Wildcards allowed in Wildcard patterns:

- * Replaces none or arbitrarily many alphanumeric characters.
- ? Replaces exactly one alphanumeric character.

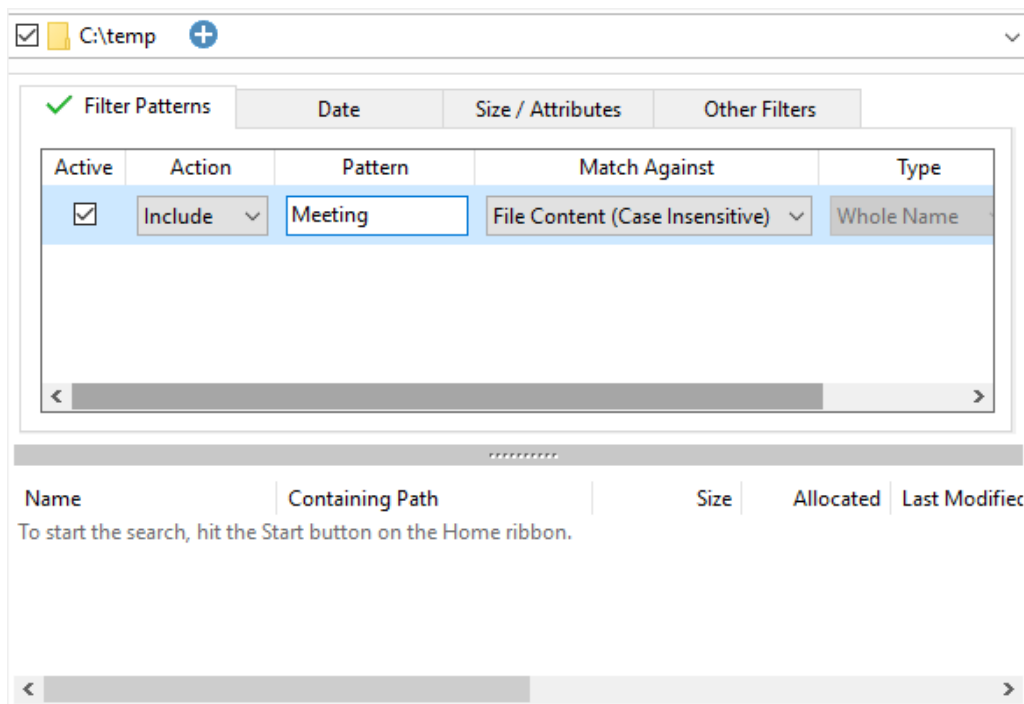
Not only names of files and folders are allowed, the patterns may also contain parts of directories. Multiple patterns can be used by separating them using semicolons. To force the exact match (instead of a substring match) of a pattern, please select "whole name" in the Type column for this pattern. [Regular expressions](#)¹⁷⁶ can also be used as patterns by selecting "RegEx" in the Type column.

The following table shows possible patterns:

Pattern	Match Against	Type	Result
*.doc	File or Folder Name	Wildcard	Searches for all files with the extension "doc".
\Windows\System32.exe	Full Path	Wildcard	Searches for all applications in the path "Windows\System32".
"New Text Document.txt"	File or Folder Name	Whole Name	Searches for all files named "New Text Document.txt".
[A-Za-z]:\\([\\]+\\){2,4}[\\]+\$	Full Path	RegEx	Searches for all files on drives with a directory depth from at least 2 and at most 4.
admin*	Owner	Wildcard	Searches for all files with a file owner starting with "admin..." (e.g. "Administrator" or "Administrators")

7.8.1.1 Search for file content

In addition to file name, fullpath, or owner, you can also search for files that have a specific content. The TreeSize File Search can analyze the textual content of a file and look for a given set of search terms. If TreeSize finds this text inside of a file, the file is returned by the custom search. This is possible for non-plain text file formats as well, such as PDF, Microsoft Excel or Microsoft Word.



To get started, create a new include filter as described [here](#)^[121] and select "Match Against" > "File Content" or "File Content (Case Insensitive)". TreeSize will match the content of all file candidates with the text that is defined under "Pattern" and retrieve all files that contain this text.

Plain text and IFilter

TreeSize is able to search plain text files very quickly, by traversing them directly on file system level and matching their content to the given search term. All commonly used file encodings, such as ASCII, Unicode, or UTF-8 are supported.

For more complex file types, such as Microsoft Word, Excel or PowerPoint, TreeSize uses the IFilter interface, which is provided by the operating system. Any application can register their own filter handler for a specific file type. Some handlers are already shipped alongside with Windows. An example for such a filter handler is the one that handles document types and allows to read the content of files that are saved in the .docx format.

Other file types, such as PDF, can be read by filter handlers that are installed by PDF reader applications. They are registered during the installation of the PDF reader application and available for TreeSize automatically.

Case sensitivity

If you want to perform an exact search for a specific term, including the use of capital and small letters, select the match target "File Content".

If, however, you want to ignore case sensitivity during the search, you can select "File Content (Case Insensitive)". With that option, TreeSize will analyze

the file content while disregarding differences in capital or smaller case letters. In order to do so, TreeSize will use the code page associated with the currently specified locale.

Searching for multiple terms

In some cases, it might be useful to search a file's content for multiple search terms and return all results that contain **at least one** of these search terms. In other cases, however, it might be preferable to return only files where **all** of the search terms match. Both of these cases are possible with the file content search.

In general, multiple include filters of the same type are combined via the **"OR"** condition in the custom search. This means, that by simply creating multiple "Include" filters, you can define a search that returns files where **at least one** of the filters matches.

In order to combine them via **"AND"** condition and search for files where **all** given search terms match, you have to use a specific syntax. The different terms have to be encapsulated by paranthesis and need to be separated by a semicolon. The general structure of such a pattern would be **{term1;term2;term3}**.

For example:

The pattern `{quick;dog}` will match:

- The **quick** brown fox jumps over the lazy **dog**
- This **dog** is **quick**

but will not match:

- The **dog** is lazy
- Foxes do get tired very **quickly**

7.8.2 Search for file dates

On this tab you can customize a search for files and folders by looking for their last change, last access, or creation date timestamps. The searched time period can be determined by defining an interval between two dates (between X and Y) or by defining a duration relative to the current date (Since X days).

Filter Patterns	Date	Size / Attributes	Other Filters
Accessed ▾	<input type="checkbox"/> This week (Monday - Today) ▾		
Modified ▾	<input type="checkbox"/> This week (Monday - Today) ▾		
Created ▾	<input type="checkbox"/> This week (Monday - Today) ▾		

Changed / Not Changed

Search for all files/folders (not) changed within a certain period of time.

Accessed / Not Accessed	Search for all files/folders (not) accessed within a certain period of time.
Created / Not Created	Search for all files/folders (not) created within a certain period of time.
Between X and Y	Define a custom time interval, or a specific start and end date that you want to limit your search to.
Since X days	Define a duration (measured in days) counting back from today.

Defining a time period can be done by:

Selecting a time interval (relative to the current date):

- Predefined interval: The most commonly used intervals, such as "Last week", "This month", "Last year", etc. are available as predefined options. They are evaluated in relation to the current date when the search is executed.
- Since X days/weeks/months/years: Select a custom time interval that must have passed since the file/folder was (not) changed / (not) accessed / (not) created.

Selecting a specific date manually:

- entering only a start date: the filters will only find files/folders with a matching date past the selected date. The selection menu provides checkboxes, which allow to enable, or disable the start and end date of an interval for the search.
- entering only an end date: the filters will only find files/folders with a matching date before the selected date.
- entering a full interval: the filters will find only files/folders with a matching date within these boundaries.

Please note: Selecting "**Not** Accessed/Changed/Created" will negate the selection above. The file search will only return items with date values **outside** of the specified interval.

Time picker

Searching for a specific file date can be customized even further by enabling the option "[Show time picker in custom search](#)". This allows to specify a time values in addition to the dates when searching for files within a given time frame.

7.8.3 Search for file sizes and attributes

This tab enables you to customize a search for files or folders of a certain size and/or with certain file attributes.

Minimum Size

Sets the minimum file size of wanted files. The associated combo-box determines the size unit of the numerical specification.

Maximum Size

Sets the maximum file size of wanted files. The associated combo-box determines the size unit of the numerical specification.

Attributes

Include Files

Decide here if you want to search for files...

Include Folders

... or for folders/directories.

Please note: You can activate both options to search for files and folders. At least one of these options has to be activated.

You can also toggle searches for the following file attributes:

ReadOnly

Looks for the "read only" attribute in files/folders.

Hidden

Looks for the "hidden" attribute in files/folders.

System

Looks for the "system" attribute in files/folders.

Archive

Looks for the "archive" attribute in files/folders.

Compressed

Looks for the "[compressed](#)¹⁷²" attribute in files/folders.

Sparse

Looks for the "[sparse](#)¹⁷³" attribute in files/folders.

Encrypted

Looks for the "encrypted" attribute in files/folders.

Offline

Looks for the "offline" attribute in files/folders.

Temporary

Looks for the "temporary" attribute in files/folders.

Alternate Data Streams

Lists only files/folders that have (do not have) [NTFS Alternate Data Streams](#)^[173] included.

Reparse / Mount Points

Lists only files/folders that are (not) flagged as [reparse points or mount points](#)^[173].

7.8.4 Search with other filters

On this tab you can configure several search filters.

Minimum/Maximum directory level

TreeSize will only search for files that are located within the specified minimum or maximum directory level.

Use directory level [in the file system/relative to search path]

Determines whether the directory level should be evaluated relative to the current [search path](#)^[107], or as absolute level within the file system.

For example:

(Use directory level relative to search path:)

Level 1: Items that are direct children of the current search path.

Level 2: Items within the first level of subfolders of the current search path.

(Use directory level in the file system:)

Level 1: Direct children of the current drive (e.g. "C:\file.txt").

Level 2: Items that have one parent folder (e.g. "C:\Users\anotherfile.txt").

etc.

Ignore NTFS hardlinks

If checked, no [NTFS hardlinks](#)^[174] will be listed in the search results.

Minimum Number of hardlinks

Use this option to find files with a minimum number of [NTFS hardlinks](#)^[174].

Full Path longer than X characters

Sets the minimum size a file's path has to have to be included in the search.

7.9 Move checked files

This function enables you to move all checked files and folders in the search result lists to a destination of your choice, archive them in a ZIP file, delete them, or process the files. This function is accessible at "[Home > Move items](#)".

Choose Destination

Choose a destination and configure the options.

- No items have been checked.-

Move Operation

☐ Move items to Recycle Bin
☐ Delete items from disk
☐ Move items to ZIP file
☐ Pass items to executable as parameter
☒ Move items to path

Destination: C:\Users\ACS-RA~1\AppData\Local\Temp\ObsoleteFiles

Move Options

Skip existing files
☐ Leave shortcut at original location pointing to new location
☐ Delete empty directories after the operation
☐ Preserve permissions of the original items
☒ Preserve directory structure, starting from level: 0

Logging

☐ Log performed operations to:
☐ Create Undo script (if possible):

Help Execute Cancel Save & Close

Additional options enable you to configure the file system operations to suit your needs. In this section all available operations and options are listed and described.

Move Operations:

- Move checked items to Recycle Bin**

Moves all checked files directly to the Recycle Bin. To delete these files completely, you have to empty the Recycle Bin.
- Delete checked items from disk**

Deletes all checked files (a security prompt has to be confirmed).
- Move checked items to ZIP file**

Moves checked files to a ZIP file you specify in the edit field below. ZIP files containing Unicode paths can only be unzipped properly by Unicode-compatible ZIP tools like WinRAR, WinZip, or 7-Zip (see: "[Unicode Zip files](#)"¹³²).
- Move checked items to path or burn to disc**

Moves all checked files to the path you specify in the edit field below or burns them to an optical medium. The original directory structure can be preserved in the destination path. The security attributes can be copied as well. If this option is not selected, the moved files will inherit the security attributes from the parent elements. You can choose to leave shortcuts or links at the original position (read more below).
- Copy checked items to path or burn to disc**

Copies all checked files to the path you specify in the edit field below or burns them to an optical medium. The original directory structure can be preserved in the destination path. The security attributes can be copied as well. If this option is not selected, the copied files will inherit the security attributes from the parent elements.
- Pass items to executable as parameter**

An executable file will be called for every checked file and the full path of the file will be passed as parameter on the command line. The executable file may also be a batch, a PowerShell script or VBScript file (or something similar). The Windows Scripting [FileSystemObject](#) offers powerful and easy-to-use capabilities for file system and path operations. Please find an example for the use of a PowerShell Script below.

Move Options:

- Skip/Rename/Replace existing files**

Configure how TreeSize will handle name collisions in the move destination, in case a file with the same name already exists. You can skip the existing files, replace them by the new one, or rename the existing files.

Please note: Only available for "Zip" and "Move to path" operation. Not supported when burning to an optical medium.

Delete empty directories after the operation	Deletes all folders that have been emptied due to this move operation.
Preserve directory structure	<p>If this option is activated, the file system structure will be kept at the destination. If this option is unchecked, all files will be moved into one folder.</p> <p>Please note: Only available for "Zip", "Move", and "Copy" operation.</p>
Include directory with drive letter to avoid name collisions	<p>Indicates if a directory named like the source drive should be included in the destination path. Activate this option to avoid name collisions when moving files from several drives.</p> <p>Please note: Only available for "Zip" operation.</p>
Leave out directories up to level x	<p>Use this option to configure the level of parent directories to preserve. The first x parent directories will not be included in the destination path.</p> <p>For example, when moving a file "C:\Users\Smith\My Document.doc" to destination "D:\Obsolete Files" you will get the following results:</p> <p>x = 0 > "D:\Obsolete Files\C\Users\Smith\My Document.doc"</p> <p>x = 1 > "D:\Obsolete Files\Users\Smith\My Document.doc"</p> <p>x = 2 > "D:\Obsolete Files\Smith\My Document.doc"</p> <p>Please note: Only available for "Move" and "Copy" operation.</p>
Preserve permissions of the original items	<p>If this option is activated, the permissions of the original file will be used for the file in the new location.</p> <p>Please note: Only available for "Move" and "Copy" operation. Not supported when burning to an optical medium.</p>
Leave shortcut/link at original location pointing to new location	<p>If this option is activated, a shortcut or link will be created at the original location pointing to the location the file has been moved to. If you choose to leave a link and the files are on the same partition, an NTFS hardlink¹⁷⁴ will be created. If the creation of a hardlink is not possible, a symbolic link is used (Windows Vista and later). If a symbolic link cannot be created, a Windows shortcut will be used as a fallback.</p> <p>Please note: Only available for "Move" operation.</p>
Logging:	
Number of checked items	Displays the total number of checked objects.

Total size of checked items	Displays the total size of all checked files.
Log performed operations to:	Produces a log file with a name of your choice under the path of your choice. Environment variables like %DATE% or %TIME% can be used in the file name.
Create Undo script	Creates a batch file which can be run after the operation was finished to undo the changes applied during this operation. Please note: Only available for "Move" and "Copy" operation. Not supported when burning to an optical medium.

PowerShell Scripts using the example of SharePoint

We would like to show you in a practical example the use of a PowerShell script with the TreeSize File Search. The task is to prepare thousands of documents for uploading them to a **SharePoint** server. The problem is that certain characters are not allowed in filenames on SharePoint, that are valid in the normal file system and that are commonly used. Using a regular expression, which you can find in the chapter [Regular Expressions](#)^[176], it is easy to find all files that violate the SharePoint naming rules. When the search is finished, please choose in the dialog to move the checked files to pass them to an executable. As executable please choose this PowerShell script, which you have previously save e.g. as "*SharePointRename.ps1*":

```
Param([string]$filepath="")
[char[]]$illegal = "~", "#", "%", "&", "*", "{", "}", "\", ":", "<", ">",
"?", "/", "|"
$replacement = "-"
$filepathNew = [io.path]::GetFileName($filepath)
foreach($char in $illegal){$filepathNew = $filepathNew.Replace($char,
$replacement)}
Rename-Item $filepath $filepathNew
```

The script can be easily adapted or extended for further use cases.

Logging

Tip: Logging your move, archive, or delete operations provides an clarity and improves security for your system maintenance and is highly recommended.

The log produced by TreeSize shows all the necessary details to trace a maintenance act. The file will be saved in plain text format. A typical log file looks like this :

```
Starting file operation at 28.08.13 16:46.
Moving the following objects to "C:\Obsolete":
"D:\Data\BGInfo.bmp" => "C:\Obsolete\D\Data\BGInfo.bmp"
"D:\Data\readme.txt" => "C:\Obsolete\D\Data\readme.txt"
```

```
"D:\Data\Help\article.chm" => "C:\Obsolete\D\Data\Help\article.chm"
Finished file operation at 28.08.13 16:46.
Affected objects: 3 | Failed objects: 0 | Invalid objects: 0

Freed Space: 114170 Bytes (111 KB)
```

7.9.1 Unicode Zip files

TreeSize is able to zip files with file names including characters which are not part of your activated code page ([Unicode](#) file names). To restore this Unicode-decoded Zip files you will need an Zip tool able to handle Unicode encoding.

Here is a list of tools we have tested for Unicode compatibility:

- [WinRAR](#) (V3.8 or higher)
- [WinZip](#) (V11.2 or higher)
- [7-Zip](#) (V4.6 or higher)
- [PeaZip](#) (V5.1 or higher)
- [BitZipper](#) (V2013.13.4.16 or higher)
- [IZArc](#) (V4.1.8.2988 or higher)
- Windows integrated Zip tool (Windows 8 / Server 2012 or later)

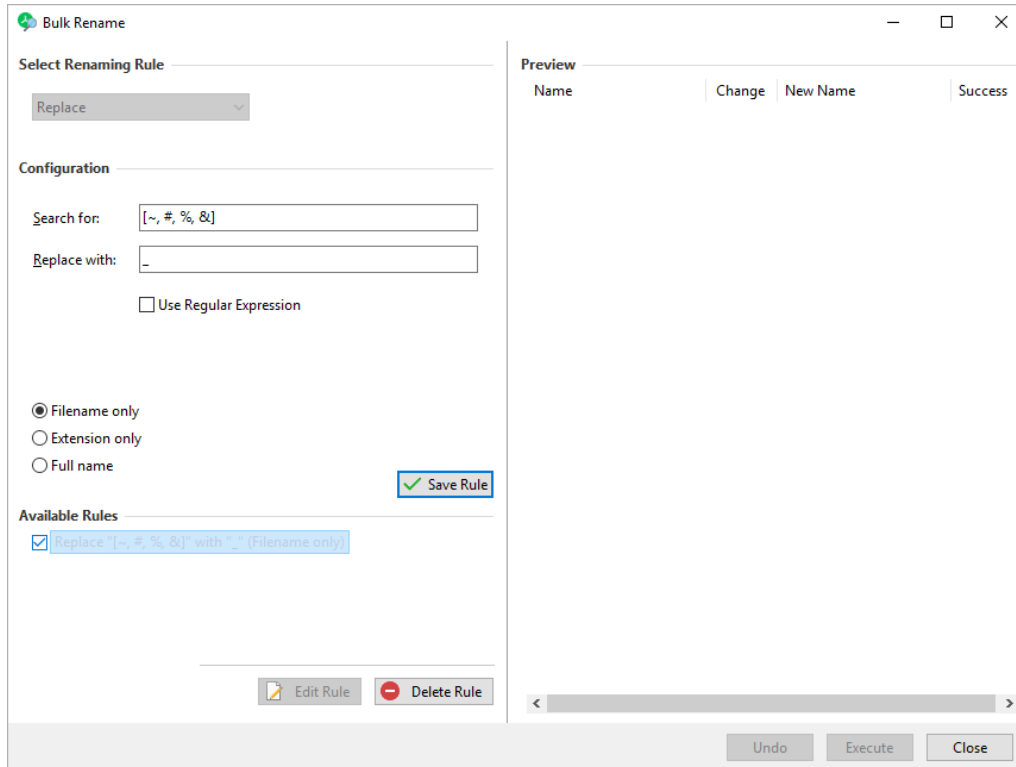
Please note that the integrated Zip tools of Windows Vista, Windows 7, Windows Server 2003, and Windows Server 2008 are **NOT** Unicode compatible.

7.10 Bulk rename

This dialog allows renaming multiple files at once, using one of several types of rules. This function can be accessed via "[Details > Bulk Rename](#)"^[42] in the main module, or "[Home > Bulk Rename](#)"^[103] in the file search.

To define a new renaming rule, select the desired options on the left hand side of this dialog and then select "Add Rule". The section "[Available Rules](#)"^[134] shows all rules that have previously been created. Each rule can be activated or deactivated individually and will be applied in the order that they are displayed in. You can reorder existing rulesets by simply dragging and dropping them within the list of available rules.

The right hand side show a [preview](#)¹³⁴ of the current ruleset. It shows the file names before and after the rename operation and provides a quick overview of whether or not the filename will change or remain the same after the operation.



Select Renaming Rule

Defines what type of renaming should be applied. TreeSize supports a variety of renaming types, ranging from a simple "Search & Replace" to a fully customizable "Serialize" function that allows to include a uniform numbering scheme to the selected file names. The following rule types are supported:

Replace A simple search and replace operation for file names. Under **"Configuration"**, you can enter the search term to search and what to replace it with. Activate the option **"Use Regular Expression"**, if the input term should be interpreted as a regular expression, instead of an exact match. Further information about regular expressions can be found [here](#)¹⁷⁶.

Insert Inserts the given text to the file name at the position that is defined under **"Configuration"**. The text can be appended as prefix, as suffix, or at a specific position.

Serialize Adds a number to the files, starting with the value that is defined under **"Configuration"**. The number can be added as prefix, as suffix, or at a specific position. It is also possible to unify the numbering to a minimum

length. Check the option "**Pad to length**", in order fill up numbers with leading "0"s and ensure a unified length.

Delete The delete rule has two options: Search and removes a certain text, or delete text at a certain position within the target file names. "**Delete text**" will remove all occurrences of a given search term. "**Delete from position**" will remove text at a given position within the target file names. Use "**Length**" to define how many characters should be removed.

The selection "**Filename**", "**Extension only**", "**Filename + Extension**" determines which part of the file name should be affected by the rename operation. This selection can be configured for each rule individually.

Available Rules

This list shows all previously created renaming rules. The rename operation will be applied in the order of this list. To change the order that the rules are applied in, simply drag and drop the rules to their designated position within the renaming chain. You can also use the right click menu to move the current selection up, or down in the list.

Existing rules can be temporarily disabled via the left hand checkboxes. Only active rules will be regarded in the actual renaming operation.

Preview

This panel shows a preview of the rename operation with the current selection of active renaming rules. The column "**Name**" shows the original file name, while "**New Name**" shows a preview of the names as they would be after the rename operation. The "**Change**" column shows at one glance which names will change and which will remain the same. The column "**Success**" will show whether or not the renaming of a file was successful, after the operation has finished. If a file could not be renamed successfully, e.g. due to missing permissions, it will be shown in this column.

Execute

Starts the actual rename operation. All active rules will be applied to the files on the right hand side, one after another. Once the operation has finished, the status is shown in the column "Success" of the preview list.

Undo

Reverts the last renaming operation back to its previous state. This effectively means that another rename operation is triggered that renames the files back to their original name.

7.11 Options Dialog

Using the Options dialog you can adjust various settings which affect the appearance, the search behavior, the export and the start of the TreeSize File Search.

These are the available options pages:

General

[Search Engine](#)  136

General settings influencing the search behaviour of TreeSize File Search.

[Exclude Filter](#)  136

Define filtering options for TreeSize File Search.

[View](#)  138

General settings influencing the appearance for the search results of TreeSize File Search.

[Export](#)  140

Configure options for export generation of TreeSize File Search.

[Email](#)  140

Customize email settings for TreeSize File Search.

[Start](#)  142

Define start parameters for TreeSize File Search.

[File Groups](#)  142

Defines the available file groups and which file types should be assigned to which group.

Duplicate Search

[Filter](#)  143

Configure specific settings just for the Duplicates Search.

7.11.1 General Options

- [Search Engine](#)  136

- [Exclude Filter](#)  136

- [View](#)  138

- [Export](#)  140

- [Email](#)  140

- [Start](#)  142

- [File Groups](#)¹⁴²

7.11.1.1 Search Engine

Follow mount points and external symbolic links to directories

You can decide if TreeSize should follow symbolic links and mount points (see [Notes on NTFS](#)¹⁷² for additional information) that point to other drives or folders on other drives. Links that point within the scanned directory will never be followed in order to prevent circular references and folders from being counted twice.

Skip offline files in searches that access file content

Certain search types, such as the duplicates search via MD5-checksum, or the custom search for file content, accesses the content of a file. This would trigger the download of offline files, which is not intended in most cases. Activate this option, to prevent this.

Select whether a comparison against file sizes will regard the normal file size or the size on disk.

You can decide if the file size or the allocated size (size on disk) will be used when for example minimum or maximum values are set for file size search criteria.

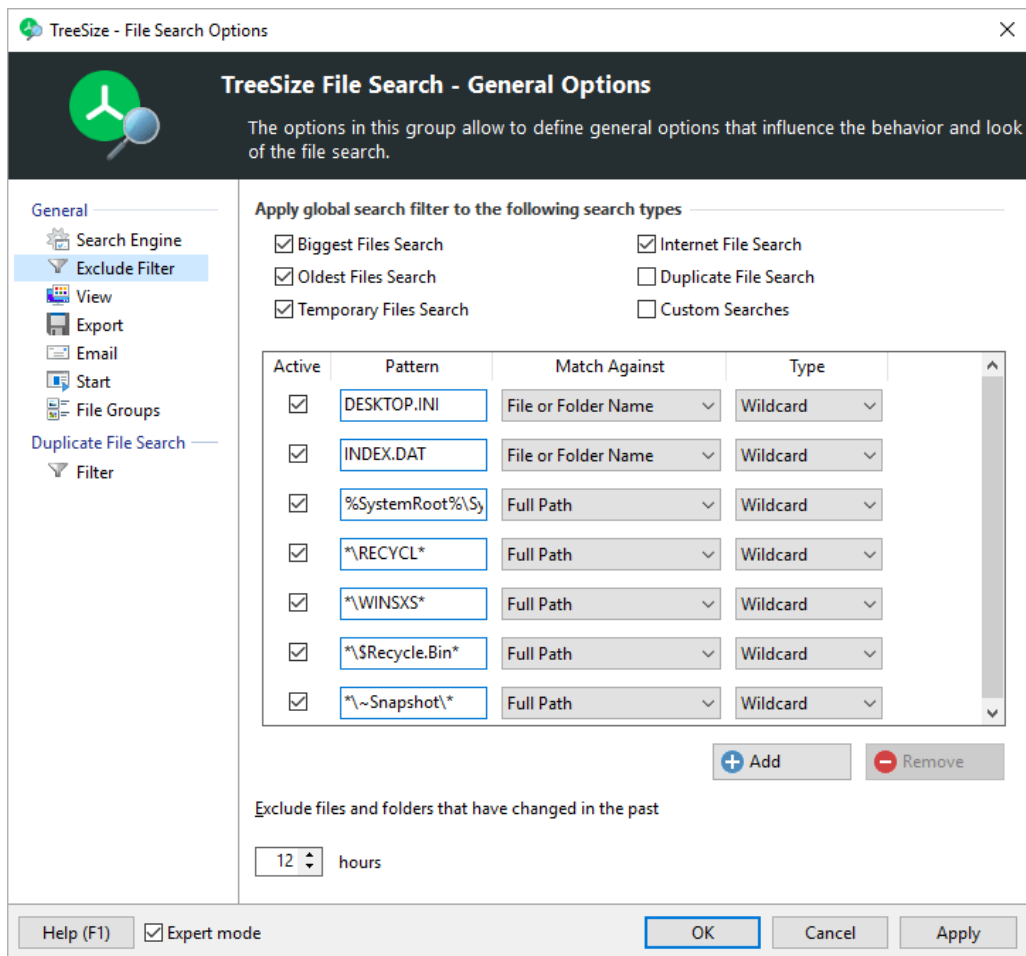
7.11.1.2 Exclude Filter

Global Exclude Filter

The file search was designed to identify obsolete or very large files in order to clean up a system. Certain files like system files, however, should not be deleted because they are needed by the operating system or other software. Files known to be important for a system can be added to the exclude list here and will then not be shown in the results any more.

This option allows you to define exclude patterns which will be used when searching for files. Each file/ folder will be compared against the patterns and, if matching, not listed in the result list.

An exclude pattern can be a complete folder or share as well as an regular expression pattern.



Additionally, you can exclude files that have been changed in the past hours. If a file has been changed recently, there is a high probability that the file is not truly obsolete.

Please note: This option will NOT be applied to the [duplicate file search](#)^[112] and to the [custom search](#)^[119] by default. However, you can enable it by activating the corresponding option ("Use global exclude filter") for these searches.

Apply global search filter to the following search types

Via these check boxes you can quickly select for which of the predefined search type the currently defined search options are valid. By default the custom search type is excluded here so the user each time decides in the search mask what criteria shall apply for the custom search.

How to define an exclude filter

To define a new filter, please follow these steps:

1. Click the "Add pattern" button. An entry will be created in the filters list for the new filter.

2. An exclude filter for the pattern "*.exe" for example will make TreeSize to not show any files with the extension ".exe".
3. Define the actual pattern. You can either use simple **Wildcard pattern** such as "*.exe", **Regular Expression** patterns such as ".+\\.exe\$", or patterns that match **full names** like "notepad.exe". Please make sure that you select the matching pattern type on the **"Type"** selector on the right side of the window.
4. The "Match Against" selector is used to specify the element/attribute against which the pattern is compared. Patterns can either be matched against file names, (full) paths, owners, folder names, or object names. You can use the "owner" filter to, for example, include or exclude certain file owners from the TreeSize scan results. With the "full paths" or "folder name" filter you can exclude complete directory branches matching a certain pattern (e.g. "\\Program Files*"). The "file name" filter should be used when you intend to exclude certain file extensions (e.g. "*.tmp"), like described in step 2.

Hint: New files or folders can also be easily added to this list using the right-click menu of the result lists ("Add to exclude list").

Remove pattern

Deletes the currently selected pattern row.

Preview the results

The "Preview" button enables you to view the results of a defined search pattern. The preview will use the currently selected pattern to show an Explorer-like view highlighting excluded items.

Additional Filter Settings

Exclude files and folders created in the past ... hours

If this option is set, only files and folders which have been created earlier than the specified amount of hours will be scanned. This can be useful to calculate the size of backups or to identify "heavy growing" folders. A value of "0" means that all files will be included (default).

7.11.1.3 View

File and Folder Options

Determine icons based on file extension

If this option is set, you will see the default icon for a file of this extension type in the search result list.

Show compress files/folder in blue

If this option is set, NTFS compressed files/folder will appear in blue color in the search result list.

Check results by default

If this boxed is checked, all results in the list will be automatically checked so processing additional steps (like Export, Move items,etc) can be performed with one click.

Show long tooltips

If this option is active, a tooltip window with detailed information will be shown if the mouse cursor hovers over a file or folder for a while.

Show time picker in custom search

When searching for files with a specific date, you might want to further customize the search and look for files that were modified/accessed/created at a specific time. Enable this option to show time pickers, in addition to the date selection, in the [custom search](#)^[119].

Language

Use language

Select the language that is used for TreeSize's user interface.

Date/Time Format

Use the following date/time format, e.g. for "Last Access":

The date/time format that is used by TreeSize in related columns like "Last Access", "Last Change", or "Creation Date" can be defined here. Available formats are date, date+time (without seconds), and date+time (with seconds). Please note that in some rare cases TreeSize may display "wrong" date/time format. For more information on this issue, please refer to [this article](#) from our Knowledge Base.

Username Format

Format for the username appearance if displayed in search result list or export files.

Either just the username is displayed or user name including the related Active Directory domain where user belongs to.

Notifications

Notify, when the search has finished

If this option is enabled, TreeSize will play a notification sound, when the search has finished. If TreeSize is minimized, when the search finishes, it will also show a notification in the Windows notification center, which includes a summary of the search that was just performed and the results that were found (Only supported in Windows 8 and higher).

7.11.1.4 Export

Header information

You can specify the amount of additional header information that is included in exports of the file search.

Add summary information

Activate this option to include a short summary of the search into the export. This summary contains the path(s) that were processed, the date/time of the search, and the number and size of files and folders that were found.

Add column headers

If this option is set, TreeSize will include a row that displays the names of the columns, in addition to the actual search results.

Include units in export

If this options is activated, units like "KB", "MB", or "%" will be included in the exported data. Uncheck this option, if you want to export plain values.

Export path list

Include duplicate groups

This option allows the export of duplicate search results via "File > List of paths > Export path list". If this option is enabled, TreeSize will include the group structure of the duplicate search, when generating a list of files. This allows importing a previously performed duplicate search, without the need to perform the search again.

7.11.1.5 Email

Configure email settings for TreeSize File Search.

Email content

To

The email address the report will be sent to.

Subject

The subject of the email. Supports environment variables such as %DATE%, %TIME% or %USERNAME%.

Format

Choose an email format here.

Transport

Use MAPI client

If this setting is checked, TreeSize will use the local MAPI client (for example Microsoft Outlook) for sending mails.

Use SMTP server

TreeSize will use the specified SMTP server to send email reports. Please make sure to test the connection settings before applying the current options. Please note that you will have to enter valid SMTP settings in order to make use of email reports in [scheduled scan or search tasks](#)^[144] or all other kinds of automated starts (e.g. batch programs or command line calls) (Professional Edition only).

From

The email address that will be shown as the sender of the report.

Server

The name (DNS) or IP address of the machine hosting the SMTP service through which messages are to be sent.

Port

The port on which the SMTP service specified in the "Server" field is listening for connections.

Use secure (SSL) connection

Indicates that Secure Sockets Layer (SSL) should be used when sending messages via SMTP.

This server requires authentication

Select this option if SMTP service specified by the Server field requires authentication. Passwords will be encrypted before storing them in the TreeSize settings file.

Test Connection

Test the SMTP connection settings. This will send a test email to the email address specified in the "To" field.

Exported lists

Active list / all lists

Select which search result lists shall be included in the email : only the currently active search types or all search types.

Exported elements

Checked items / all items in the list

Select here, if you want to have just the checked/marked result list entries or all entries from the result list included in the email report.

7.11.1.6 Start

Modify startup settings for TreeSize File Search

Start As Administrator

Always start this application as administrator

When activated, TreeSize will always start with administrator privileges. This will trigger the UAC (User Access Control) prompt, if UAC is enabled.

Action at Application Start

Load last search settings.

Open file search with the last used settings. Does not start a search automatically.

Run a search using the last load search settings.

Open file search with the last used settings and automatically start a search with these settings.

Run a search using the the following saved search settings.

Start File Search and directly run a search based on previously saved search settings. The XML file containing these settings must be specified here, either by typing the path into the edit field or via browsing in Windows Explorer after clicking the folder button.

Explorer Context Menu

Show TreeSize File Search in Windows Explorer context menu of current user

Select whether the TreeSize File Search should appear in the context menu of folders in the Windows Explorer.

7.11.1.7 File Groups

This page allows to modify the different file type groups that are available in the file search and which file extensions should be assigned to which of the different groups. Each of these groups can be used as a [search pattern](#)^[120] in the custom search. The input field "Pattern" can be used as a dropdown, to select one of the available file type groups.

More information, about how to customize these groups, can be found in the chapter "[File Groups](#)"^[72] for the main module of TreeSize. Both the file search and the main module share the same file type groups, so any information that you may have gathered with the help of the [Extensions](#)^[45] view can be further analyzed with the appropriate file search filter.

7.11.2 Duplicate File Search

7.11.2.1 Filter

Define filtering options explicitly for TreeSize Duplicate File Search here.

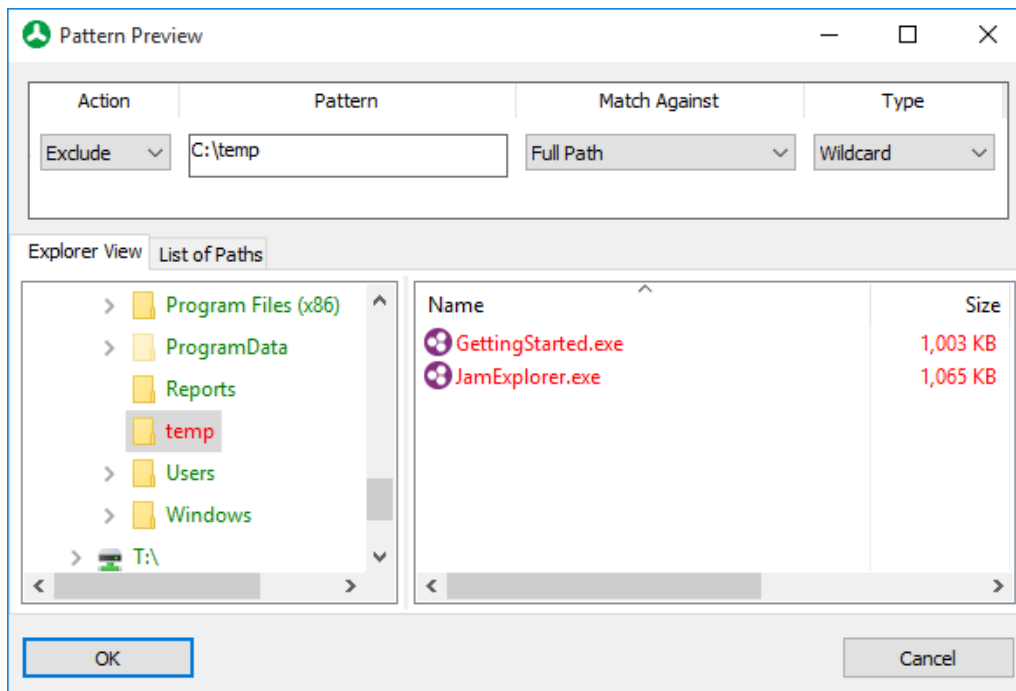
Define a filter (exclude or include)

To define a new filter, please follow these steps:

1. Click the "Add pattern" button. An entry will be created in the filters list for the new filter.
2. Decide whether this filter shall operate as an **exclude or include filter** using the "**Action**" selector of the newly created entry. An exclude filter for the pattern "*.exe" for example will make TreeSize to not show any files with the extension ".exe". This will also affect the calculated values such as the "Size" in the [Directory Tree](#)^[31] as well as any other [view](#)^[34]. An include filter, on the other hand, will make TreeSize show only items that match this pattern. To return to the previous example, an include filter of "*.exe" would result in a Directory Tree showing only data related to files that have the extension ".exe".
3. Define the actual pattern. You can either use simple **Wildcard pattern** such as "*.exe", **Regular Expression** patterns such as ".+\\.exe\$", or patterns that match **full names** like "notepad.exe". Please make sure that you select the matching pattern type on the "**Type**" selector on the right side of the window.
4. The "Match Against" selector is used to specify the element/attribute against which the pattern is compared. Patterns can either be matched against file names, (full) paths, owners, folder names, or object names. You can use the "owner" filter to, for example, include or exclude certain file owners from the TreeSize scan results. With the "full paths" or "folder name" filter you can include or exclude complete directory branches matching a certain pattern (e.g. "**\\Program Files**"). The "file name" filter should be used when you intend to include or exclude certain file extensions (e.g. "*.tmp"), like described in step 2.

Preview the results

The "Preview" button enables you to view the results of a defined search pattern. The preview will use the currently selected pattern to show an Explorer-like view highlighting excluded and included items in appropriate colors (red and green). The following screenshot shows the results of an exclude filter for full paths that match the pattern "C:\\temp".



Additional Filters

Ignore NTFS hardlinks

Ist diese Option aktiviert, werden Hardlinks nicht als Datei-Duplikate betrachtet.

Hinweis: [NTFS Hardlinks](#)¹⁷⁴ allokierten keinen Speicher. Deshalb wird durch ihre Löschung kein zusätzlicher Speicher verfügbar gemacht. Darüber hinaus verwendet TreeSize Hardlinks für die [Deduplizierung](#)¹¹⁵.

Exclude offline files

Files with the attribute "offline" will be excluded from the search. Offline files are often not physically present on the disk or are only cached temporarily on the local disk. During the duplicates search, TreeSize will calculate the checksum of a file, using the file content. Accessing the file content would restore cached files, which might be undesirable. With this option, you can prevent the duplicate search from accessing these files.

8 Using Scheduled TreeSize Tasks

This section is related to the Professional Edition of TreeSize only, since the Personal Edition does not offer scheduling or command line options!

Keeping your storage in a "clean" state is an ongoing task and requires a consistent overview of the usage. In a real world scenario it is important to find space hogs that use up large portions of the disk as soon as possible. Therefore you might want to use TreeSize to scan your storages regularly after a certain period of usage. Rather than having to do this manually every time, TreeSize offers a functionality to create tasks that automatically run according to a predefined schedule. This allows you to perform scans, send reports or

perform any customized action that you can define freely at any time of the day. Defining a new task can be done by using the [Schedule Dialog](#)^[145].

The dialog allows you to choose one or multiple paths to scan and allows a variety of ways to export the results of the scan.

All settings that are defined here will be applied to the scan task automatically. TreeSize will assign the corresponding [Command Line Options](#)^[156] to the new task and reapply them to the user interface when you want to edit an existing task at a later point in time.

8.1 Schedule Dialog

It is possible to schedule tasks using the "**scheduled tasks**" folder of Windows. This dialog will help you create a scheduled TreeSize Professional task with the corresponding command line options.

Please note: This feature is only available in the Professional Edition.

Open the dialog by clicking on "[Scan > Schedule this scan](#)"^[26] from within the TreeSize Professional main application or on "[Tools > Schedule current search](#)"^[105] from the TreeSize Professional File Search.

The TreeSize tasks can be configured, viewed, and edited using the following tabs:

Current Task

[Options](#)^[146]

Contains general options, such as the scan path, sorting, or filter that you want to apply to your scan results.

[Export](#)^[148]

Allows to define which in which formats you want to export your reports in this task.

[Move Operation](#)^[150] (TreeSize File Search only)

Search results can be moved automatically by this task. This option can be enabled and configured here.

[Advanced](#)^[151]

Provides advanced customization possibilities, such as a custom title for the export, or a different list separator.

[Command Line](#)^[153]

A preview of the command line parameters that will be used for this task. In this page, you can test the current settings, copy the parameters to the clipboard, or save them to a batch file.

[Schedule](#)^[154]

Here you can set up a date and time when the task should be executed.

All Tasks

List of Tasks ¹⁵⁵

Shows a list of all TreeSize tasks that were created in the past.

Use the **"Save Task"** button to save your configurations in a new Windows scheduled task.

8.1.1 Options Tab

You can specify further options for the scan and the exported results here.

Path(s) to scan

Enter the path or multiple paths to be scanned here. Please note: Multiple paths have to be quoted using double quotes (") and have to be separated by a blank.

Options file

Use this option to apply previously exported user settings to the current operation. User settings of the main application can be exported using ["File > Options > Export"](#) ¹⁸⁾; settings of the TreeSize File Search can be exported through ["File > Save search options"](#) ¹⁰⁰⁾.

Export Options

Sort By

Choose a [view type](#)^[43] to sort the export reports by. Select "Last used in user interface" to use the view type configured when TreeSize was used the last time.

In addition to the list of columns that are selectable, you can also manually enter the name of any other column, such as "Owner", by using the free text input.

Size Unit

Specify the unit size values will be displayed in. Select "Last used in user interface" to use the size unit configured when TreeSize was used the last time.

Include units in export

If this option is check-marked, units of measurement like "KB", "MB", or "%" will be included in the exported data. Uncheck this option if you would like plain number values to be exported. Without units, the thousands separators will also be omitted, thus simplifying further processing of the exported data.

Expand

Specify how many levels in the directory tree will be expanded after scanning. If you select "Full", all folders will be expanded. Instead of a directory level you can also indicate a minimum folder size. In this case, all folders larger than the specified amount will be expanded.

Filter

Include single files

Activate this option to ensure that single files are included in exports of this scheduled scan.

Hide elements smaller than

Defines a minimum size for small files and folders. Only elements that exceed this value will be shown in the export.

Exclude following file types

Specify patterns for files and folders to be excluded from a scan.

Include only following file types

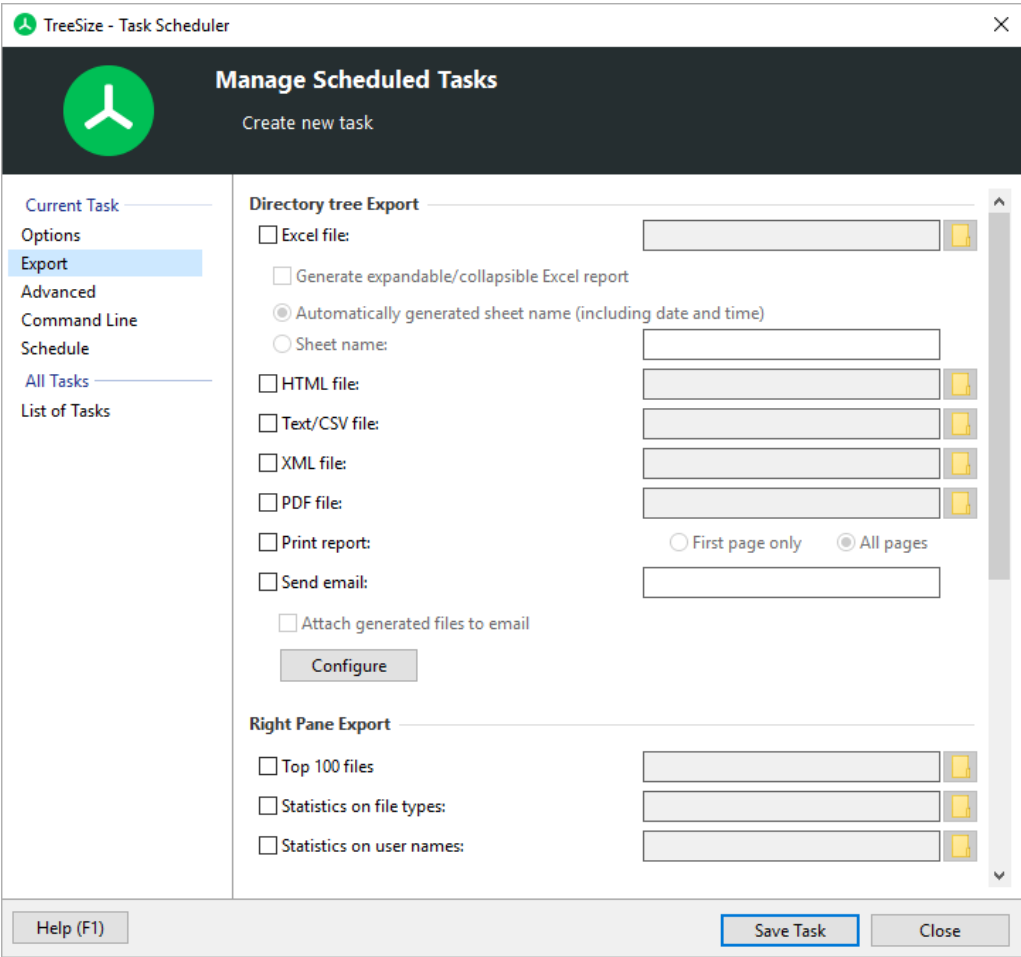
Enter a file pattern filter here. Only files matching certain patterns (e.g. *.MP3 or *.DOC) will be included in the scan.

Include only files with archive attribute set

This option will include only files in the scans for which the Windows archive bit was set. This option can be very useful if you want to calculate the size of a backup based on the Windows archive bit for a certain directory.

8.1.2 Export Tab

Here you can select which of the export options supported by TreeSize Professional will be used for the scan.



Directory Tree Export

Excel file	Exports the collected data to Excel and saves it under the selected file name.
Generate expandable/collapsible Excel report	Activate this option to create an interactive Excel report, where each directory can be expanded and collapsed separately.
Automatically generated sheet name (including date and time)	The new Excel sheet will be automatically named in an informative way, including date and time information in the sheet name.
Sheet name	Enter a sheet name here. Please note: If the sheet name is not unique in the selected Excel file and you check-marked "Append to

	existing file", the new export will be appended to the existing sheet. If "Append to existing file" is unchecked, a suffix will be added to the sheet name to make it unique."
HTML file	Saves the collected data to a HTML file which can be viewed with any HTML browser.
Text file	Saves the results to a text or CSV file after the scan or search operation is finished.
XML file	Saves the results to a XML file. The file may be loaded at a later date and can be used for comparisons (See: " Compare with saved scan ^[25] ").
PDF file	Saves the results to a PDF file after the scan or search operation is finished.
Print report	Prints a report for the scanned directory branch on the default printer. Choose "First page only" to print only the first page of a report or "All pages" to print all pages.
Send email	Sends an email with the chosen exports to the recipients specified here. Note: Multiple email addresses have to be separated by a semicolon (;).
Attach generated files to email	Activate this option to attach all generated report files to this email.
Send email only if results were found	(File Search only) With this option, TreeSize will only send an email if at least one result has been found by either of the activated file searches.
Right Pane Export	
Top 100 files	This option allows you to save the " Top 100 Files ^[51] " of the scanned file system branch to an Excel, CSV, or text file.
Statistics on file types	This option allows you to save the " Extensions ^[45] " statistic of the scanned file system branch to an Excel, CSV, or text file.
Statistics on user names	This option allows you to save the " Users ^[47] " statistic of the scanned file system branch to an Excel, CSV, or text file.
Charts to include	Saves the Pie-, Bar-, Age of Files-, History-, Extensions-, Users-, or Tree Map chart of the scanned directory to a bitmap, GIF, JPEG, or PNG file. The file type depends on the extension of the specified file name.

Charts to include

Saves the Pie-, Bar-, Age of Files-, History-, Extensions-, Users-, or Tree Map chart of the scanned directory to a bitmap, GIF, JPEG, or PNG file. The file type depends on the extension of the specified file name.

Please Note: Some of the statistics can additionally be exported in a text format, such as CSV.

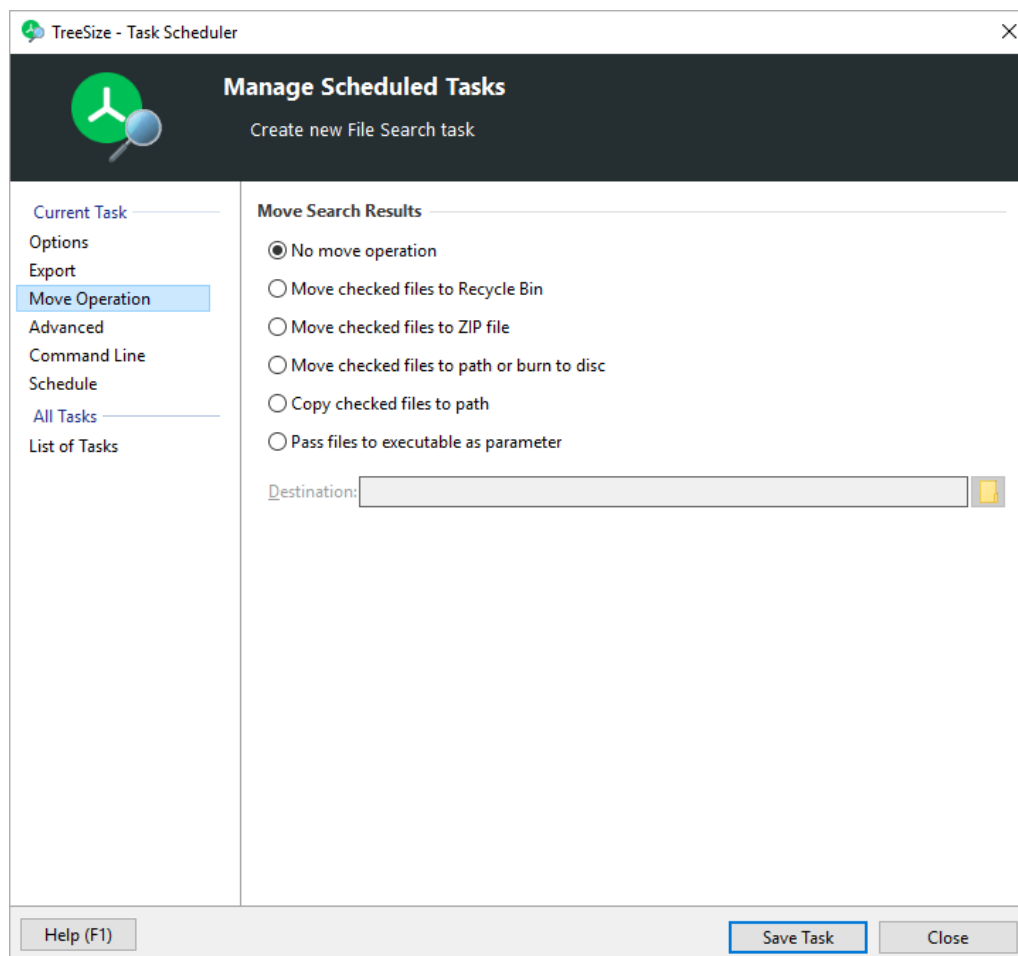
General Options

Append to existing file Activate this option to append the selected exports to existing files. to run scans regularly every night or every weekend.

Add date and time to filenames This option will add the current date and time to all exported file names.

8.1.3 Move Operation Tab

Here you can configure move operations to be performed automatically after the TreeSize File Search has finished.



Move search results

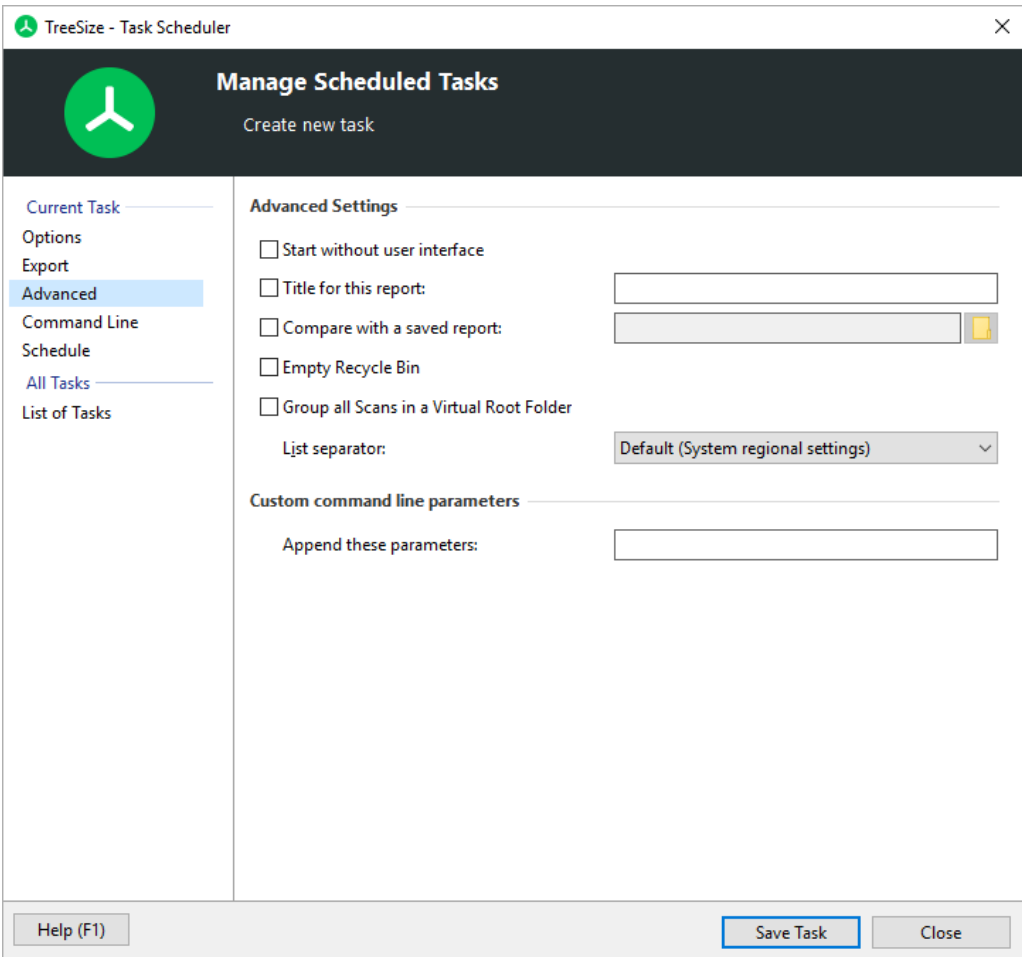
Configure move operations to be performed with the results of a TreeSize File Search. The options are comparable to the options of the "[Move Checked Files](#)^[128]" operation.

You can find the additional information about the creation of scheduled move operations in [this](#)^[170] chapter.

Please note: This option will perform changes on your file system. These changes cannot be reverted automatically. Please use with caution!

8.1.4 Advanced Tab

Here you can specify advanced options for the scan and the exported results.



Advanced Settings

Start without user interface

No window will be shown and the application will not appear in the task bar. Useful for background scans.

Title for this report

Can be used to change the title of the printed or exported report. The use of environment variables is

allowed.

Compare with a saved report

Compares the scanned path with a saved XML report. The exports you configured on the "[Export](#)^[148]" tab will show the differences of the current file system compared with the saved XML report.

Empty recycle bin

If this option is active, TreeSize will automatically empty the recycle bin of the current user before any other operation is executed.

Group scans in a Virtual Root Folder

Using this option will group all scanned directories under a "virtual root folder", corresponding to the option "[View > Group scans](#)^[27]" from the main user interface. See topic [Directory Tree](#)^[33] for more information.

List separator

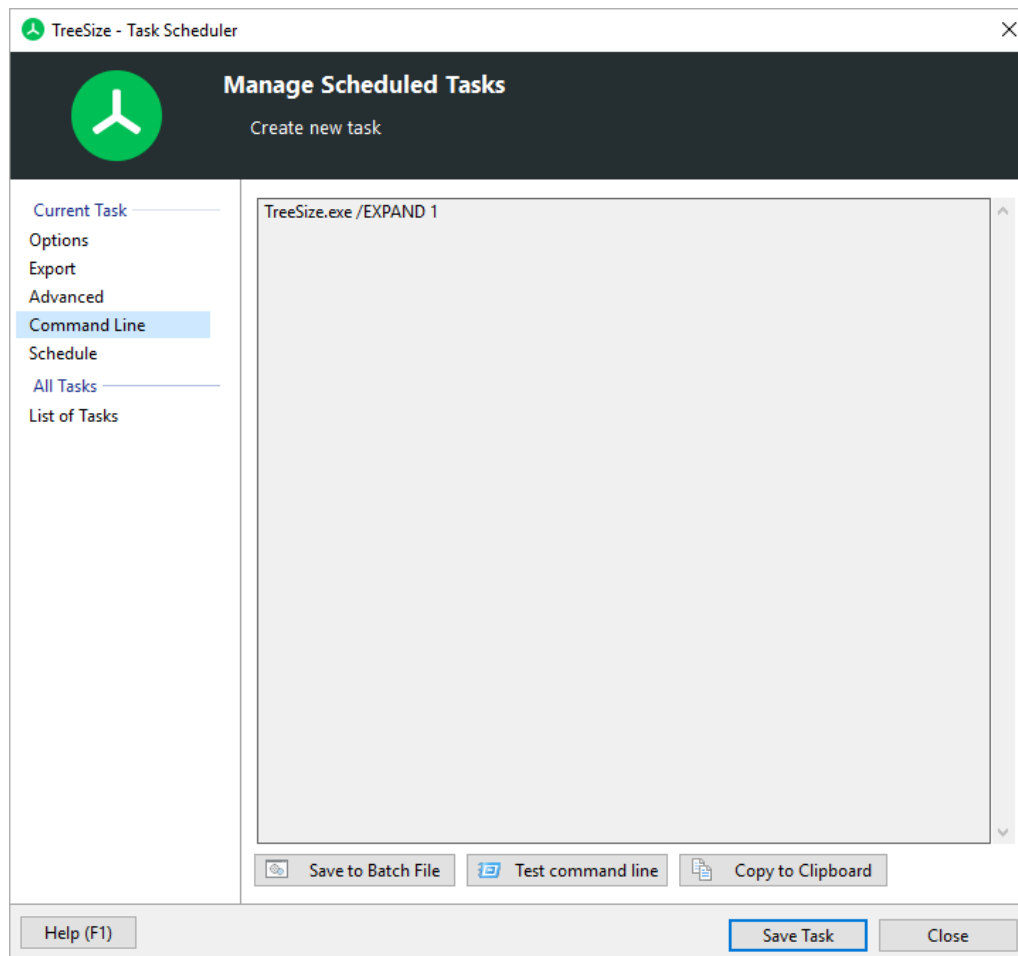
Configure the separator to be used for text and CSV exports here.
Select "Default" to use the most suitable separator for the selected export type (tabulator for text files, list separator from the systems regional settings for CSV files).

Custom command line parameters

This input field allows to add custom [command line parameters](#)^[156]. TreeSize supports a variety of [command line parameters](#)^[156], not all of which are available as option in the user interface. With this text field, however, you can add them manually.

8.1.5 Command Line Tab

In this tab you can view the full command line of the currently configured task.



Use the context menu or the corresponding buttons below the command line to save the TreeSize task to a configurable batch file, to run the TreeSize task now, or to copy the task to the clipboard.

8.1.6 Schedule Tab

Here you can specify when and in which interval the task should be executed.

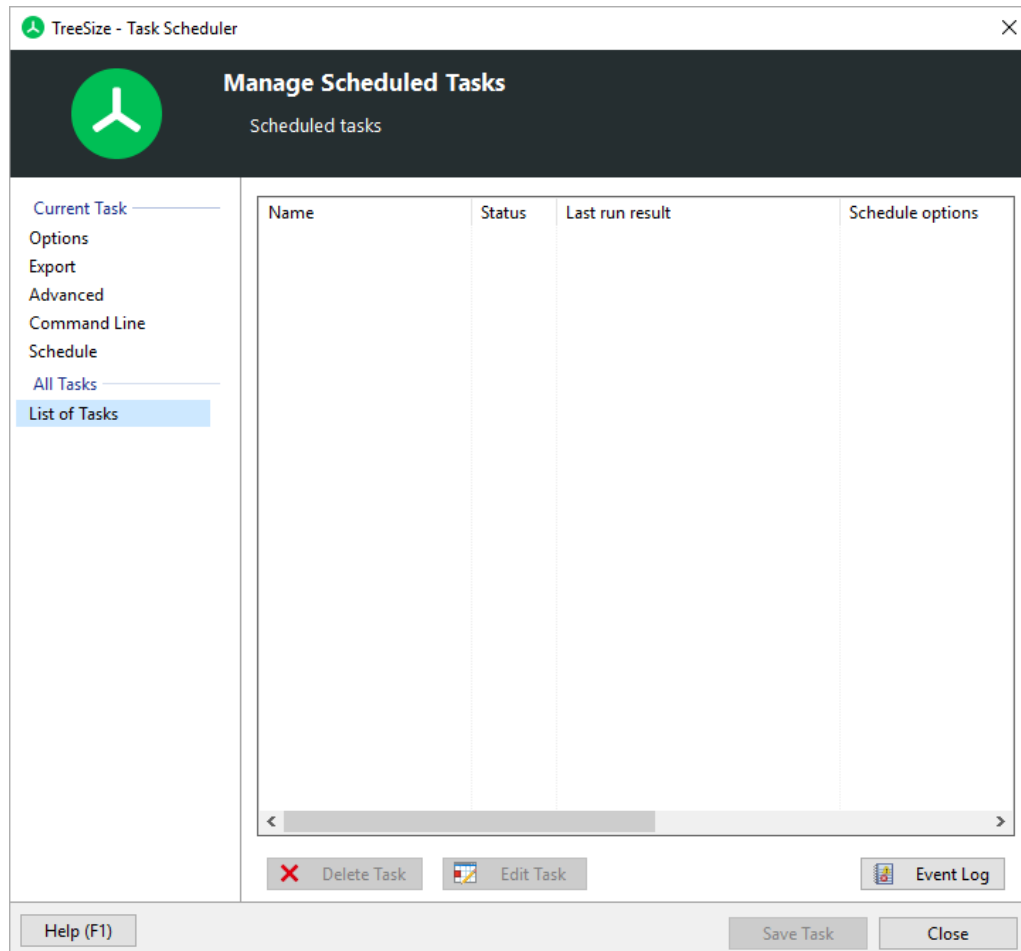
Schedule Interval

- Once** The task will be executed only once, at the specified "Start at" date and time.
- Daily** The task will be executed every day, or all 2,3,4... days, starting at the date and time specified under "Start at".
- Weekly** The task will be executed weekly (on a specified week day), starting at the date and time specified under "Start at".
- Monthly** The task will be executed monthly. You can set up a task to run either
- on all specified days. For example: "On day 1,15, and 30 of the month."
 - on certain weekdays, such as "every second and last Monday" of the month.

Both options will be applied after the starting time and date that was specified under "Start at".

8.1.7 All Tasks Tab

Shows a list of all scheduled Windows tasks that trigger an execution of TreeSize.



This list shows detailed information about each task:

Name	The name that was given to the task when it was created. This can help you identify unique tasks, for example a specific search, or a monthly scan.
Command line options	Shows the command line parameters that will be used for this task.
Schedule options	The time parameters that were defined for this task. This determines when and how often it will be executed.
Run as...	The account information that is used for this task. Please note: If no explicit options file is used for this task, TreeSize will use the settings of this user.

Last Status The last status of this task. This column shows if the last execution of a task was successful, if it failed, or if it has never been executed yet.

By right clicking one of the tasks, you can open the context menu that allows to activate or deactivate an existing task, edit it in Windows directly, or perform other operations. Some of these can also be quickly accessed via the buttons at the bottom of the page:

Edit Task	Allows you to load the currently selected task into the schedule dialog, so that it can be modified.
Delete Task	Deletes the currently selected task.
Activate/Deactivate Task	Activates or deactivates the currently selected task.
Execute Task	Executes the selected task, using the specified user credentials of the task.
Import from file	Allows to import existing tasks from an XML file. This can be useful when migrating existing tasks from an existing system to a new one.
Export to file	Exports an existing task to an XML file, which can be imported again at a later point in time, or on a different system, using the function "Import from file".
Open Windows Task Scheduler	Opens Windows' task scheduler dialog.
Event Log	Provides a direct shortcut to the "Application" section of the Windows Event Log. Any error that occurs during the execution of a scheduled task will be logged here.
Refresh List	Loads the list of tasks from the system again and refreshes the user interface accordingly.

8.2 Command Line Options

The Professional Edition of TreeSize accepts command line options enabling you to run scheduled scans or to have the results of a scan on your monitor the next morning. The [Schedule dialog](#)¹⁴⁵ will help you compile a command line with the options below. **Please note:** These option are not available in the Personal Edition.

Treesize.exe [/OPTION] SCANPATH

/? Shows this help page.
or **/HELP**

/AGEOFFILES Saves the graph on the "Age of Files" tab of the scanned directory to a bitmap, GIF, PNG, JPEG, Text, or CSV file. The file type depends on the extension of the specified file name. The following example creates a JPEG image file of the "Age of Files" graph for your local drive C:

```
Treesize /AGEOFFILES "C:\Documents\c_file_ages.jpg" "C:\\"
```

/APPENDTOFILES If this option is used, TreeSize will append its output to existing files when doing an export, e.g. when using /TEXT.

Please note: This parameter will **not** work with exported images, XML and PDF files. Those files will be overwritten, except when using the switch /DATE.

/ARCHIVEBITFILESONLY This option will include only files for which the archive bit set in the scans. This option can be very useful if you want to calculate the size of a backup. In this case, you can create a shortcut on your desktop or in your start menu that will automatically start calculating the size of your backup. Example:

```
Treesize /ARCHIVEBITFILESONLY "\\Server\Backup\This"
```

/ATTACH If specified, all exported files will be attached to the email. If not specified, files with an explicitly given path are not attached. This is useful in case you XML or Excel files are getting quite large and fill up you email account.

This example will export to an Excel file but not attach it to the mail:

```
TreeSize.exe /EMAIL "treesize@example.com" /EXCEL "C:\Temp\test.xlsx" "F:\\"
```

These examples will attach the Excel file to the email:

```
TreeSize.exe /EMAIL "treesize@example.com" /EXCEL "F:\\"
TreeSize.exe /EMAIL "treesize@example.com" /ATTACH /EXCEL
"C:\Temp\test.xlsx" "F:\\"
```

/BARCHART <filename> Saves the bar chart of the scanned directory to a bitmap, GIF, PNG, or JPEG file. The file type depends on the extension of the specified file name. This example creates a PNG image file of the bar chart for your local drive C:

```
Treesize /BARCHART "C:\Documents\c.png" "C:\\"
```

/COMPARE <filename|path> Compares the scanned path with a saved XML report. The following example scans drive C: and compares the result with a saved XML report for this drive:

```
Treesize /COMPARE "C:\Reports\TreeSize\c.xml.zip" "C:\\"
```

Instead of an XML file, you can also use a path with this command line parameter. The given path will be compared with the current scan result. The following example scans drive C:\ and additionally uses the path D:\Backup_of_C to perform a comparison between the two:

```
Treesize /COMPARE "D:\Backup_of_C" "C:\\"
```

Alternatively, you can compare two already existing XML reports e.g. "c1.xml.zip" and "c2.xml.zip" by using this command :

```
Treesize /OPEN "C:\Reports\TreeSize\c1.xml.zip" /COMPARE "C:\Reports\TreeSize\c2.xml.zip"
```

The /OPEN command prepares the comparison of the two files by expanding the first file ("c1.xml.zip") into a scan file. The second file ("c2.xml.zip") will be compared to this expanded scan file, just like it would happen, if "c2.xml.zip" was compared to a "real" scan.

**/COPYTO
<path>**

This option can only be used in combination with the command line option [/SEARCH](#)^[164]. It copies the results of a TreeSize [file search](#)^[97] to the target location.

The following command will search on your local drive C: using the latest search options and copies the search results to the folder "C:\temp\ObsoleteFiles":

```
Treesize /SEARCH:Start /COPYTO "C:\temp\ObsoleteFiles" "C:\"
```

See also: [Move checked files](#)^[128]

**/CREATED
PASTDAYS
ONLY <n>**

This option will include only files in the scans, which were created during the number of days entered in the argument. In the following example, this option will only include only files created during the last eight days in the scan:

```
Treesize /CREATEDPASTDAYSONLY 8
```

It corresponds to the option "Include only files created in the past X days" in the [Options](#)^[64] dialog.

**/CREATESN
APSHOT
<drive>**

Creates a snapshot for the drives that are given after this command line paramter. Example:

```
Treesize /CREATESNAPSHOT "C:\" "D:\"
```

Creating snapshots may require administrative privileges.

/DATE

This switch will add the current date and time to all export file names in the command line. This is useful if you want to do scans regularly, e.g. every night or every weekend. The following example will scan the network path "\\Host\Share" and save the result to a file like "C:\Scans\name_2013-08-14_17-18-24.xls":

```
Treesize /DATE /EXCEL "C:\Scans\name.xls" "\\Host\Share"
```

**/DEDUPLIC
ATE**

This option can only be used in combination with the command line option [/SEARCH](#)^[164].

It will replace the duplicate files that were found by the TreeSize [duplicate file search](#)^[112] with [NTFS hardlinks](#)^[172]:

```
Treesize /SEARCH:Start /DEDUPLICATE "C:\"
```

**/EMAIL
<recipient>**

Sends the collected data to the given email address. This parameter can be used only once on the command line, and only one email with all results will be sent. Multiple recipients can be separated with semicolons (;) or commas. To send emails via the command line, you need to specify valid SMTP settings on

the [corresponding page](#)^[92] in the TreeSize options dialog.
Example:

```
Treesize /EMAIL treesize@example.com "\\SERVER\C$"
```

If no other parameters have been specified, the email will be sent in the format that is set in the options (HTML or plain text). If you would like to define the format independent from the current options, you can use the parameters /TEXT or /HTML right behind the definition of the recipient address(es). Example:

```
Treesize /EMAIL treesize@example.com /TEXT "\\Server\Share"
```

By combining parameters you can also add attachments to the email. The following example will add an Excel report of the scan as an attachment to the email:

```
Treesize /EMAIL treesize@example.com /EXCEL "\\Server\Share"
```

/EMAILIFRE
SULTSFOU
ND

This option can only be used in combination with the command line options [/SEARCH](#)^[164] and [/EMAIL](#)^[158]. If this parameter is specified, TreeSize will only send an email with the current search results, if at least one file or folder has been found during the search, by any of the specified search types.

/EMPTYRE
CYCLEBIN

If you use this option, TreeSize will empty the recycle bin before running the current scan. Example:

```
Treesize /EMPTYRECYCLEBIN "C:\"
```

/EXCEL
<filename>

Exports the collected data in Microsoft Excel format and saves it under the entered file name. Supported formats are the conventional .XLS file format (Excel 97-2003) as well as the .XLSX format (introduced with Excel 2007). The used format depends on the extension of the specified file name. The application will terminate itself after saving. Example:

```
Treesize /EXCEL "C:\Documents\c.xls" "C:\"
```

If the file name already exists, the file will be opened and a new worksheet will be added.

Please note: In the TreeSize File **Search** (/SEARCH) the results of each search type are collected in their own specific worksheet. If the file under the given path already exists, these sheets will be overwritten. To prevent this, you need to use the command line option /APPENDTOFILES.

/EXCLUDE
<pattern1;pa
ttern2>

This option enables you to specify patterns for files and folders that should be excluded from a scan. Multiple exclude patterns can be separated using a semicolon (;). If one or more of the patterns contain spaces, the complete pattern string must be set into quotes ("). The following example will ignore files and folders that end with ".tmp" or where the exact name is "system":

```
Treesize /EXCLUDE "*.tmp;system" "\\Server\Users"
```

/EXPAND
<level|size>

This option lets you specify how many levels in the directory tree will be expanded after scanning. If you don't specify a number after this option, all folders will be expanded. Instead of a directory level you can also indicate an amount in Mega Byte (MB). In this case all folders larger than the given amount will be

expanded. The unit "MB" must follow the number without a blank. The following example will scan the folder "H:\User", expand all folders larger than 10 MB and save the result to the Excel file "C:\Results\Allusers.xlsx":

```
Treesize /EXCEL "C:\Results\Allusers.xlsx" /EXPAND 10MB "H:\User"
```

/EXPANDABLEREPORT If this option is used, Excel exports will use expandable/collapsible groups that can be navigated similar to the directory tree.

/EXPORTDRIVESLIST This option enables you to export the contents of the "[Drive List](#)"^[56] to an Excel, Text, or CSV file. The file type depends on the extension of the specified file name. Example:

```
Treesize /EXPORTDRIVESLIST "C:\Results\AllDrives.csv"
```

/EXPORTFILES If specified, files will be included in all exports. So this option is equivalent to activating the option "Tools > Options > Export > * > Exported elements > [Include single files in export](#)"^[84]

/EXPORTGROUPSEXPORTED if specified, the [export of the extensions list](#)"^[160] will contain all information about the extensions contained within groups.

/EXPORTPATHSLIST This option can only be used in combination with the command line option [/SEARCH](#)"^[164]. Exports a simple list that contains all search results. The list will contain only the full paths of the search results and no other information. Supported formats for the destination file are .txt and .csv.

This example will search for, and create a list of all exe files on drive C:

```
Treesize /SEARCH:Start /FILTER "*.exe" /EXPORTPATHSLIST "C:\Results\SearchResults.csv" "C:\\"
```

It can be used to import results of a previous search back into the user interface, by using "File > List of paths > Import path list", or the parameter [/IMPORT](#)"^[162].

If the option "Tools > Options > Export > [Include duplicate groups](#)"^[140] is activated, you can also use this function to export and import results of the duplicate search including their group structure.

/EXTENSIONSLIST This option enables you to save the statistics on file extensions / file types of the scanned file system branch to an Excel, HTML, Text, or CSV file. The file type depends on the extension of the specified file name. The exported columns will be those that were enabled in the user interface on the tab "Extensions" when it was last used, or at the time when the configuration file supplied via [/OPTIONS](#)"^[164] was written.

The following example scans drive C: and creates an Excel file named "D:\TreeSize Reports\C_filetypes.xls" with the statistics of the file types on this drive:


```
Treesize /EXTENSIONSLIST "D:\TreeSize
Reports\C_filetypes.xls" "C:\"
```

/EXTENSIONSLIST **<filename>** Saves the small graph shown on the bottom of the "[Extensions](#)"^[45] page to an image file (bitmap, GIF, PNG, or JPEG).

/EXTENSIONSPIECHART **<filename>** Saves a piechart that shows the distribution of "[file extensions](#)"^[45] to an image file (bitmap, GIF, PNG, or JPEG).

/FILTER Sets a file filter counting only files with certain extensions, e.g. ".mp3" or ".doc". Multiple patterns may be passed, separated by semicolon (;). The following example will search for MP3 and AVI files in the "Users" directory on the server:

```
Treesize /EXCEL "C:\Results\UsersMediaFiles.xlsx" /FILTER
 "*.mp3;*.avi" "\\Server\Users"
```

When performing a TreeSize File **Search** (/SEARCH), you can also use the /FILTER command line switch to specify the patterns of the [Custom File Search](#)"^[120]. To perform a more complex custom file search you should [save the search options](#)"^[100] to a file and pass the resulting XML file to the command line after /SEARCH.

/FOLLOWERPARSEPOINTS If this switch is added to the command line, TreeSize will follow [mount points](#)"^[173] and external symbolic links when scanning a file system tree.

/GROUPSCANS Using this command line switch will group all scanned directories under a virtual root folder. Use /GROUPSCANS FALSE if you want to ensure that no virtual root folder is used.

/HIDESMALLFOLDERS **<value>** Allows to hide objects that are smaller than a minimum size, which is useful for getting clear exports. **<value>** can be a size value with unit, or a plain byte value without unit. Cannot be used in combination with /EXPAND. In this example only folders having a minimum size of 50MB will be exported:

```
TreeSize /HIDESMALLFOLDERS 50MB /EXCEL "C:
\Results\DriveC.xlsx" "C:\"
```

/HISTORYCHART **<filename>** Saves the graph on the "[History](#)"^[53] tab of the scanned directory to a bitmap, GIF, PNG, or JPEG file. The file type depends on the extension of the specified file name. This example creates a JPEG image of the history graph for drive C:

```
Treesize /HISTORYCHART "C:\Documents\c_history.jpg" "C:\"
```

/HTML
<filename>

Saves the collected data to a HTML file which can be viewed with any HTML browser. You can specify which information of the scan will be included in the export via "Home > Options > Export > HTML > [Charts and lists to include](#)^[85]. You can select which of the additional lists, or charts should be added to the export. They will automatically be embedded into the HTML file that is generated after the scan.

The following example will generate an HTML report for the drive C: and save it to "D:\HTML":

```
Treesize /HTML "D:\HTML\treesize.html" "C:\"
```

If you would like to scan and export multiple drives or folders, we recommend either using one call for each drive or folder or using the command line option presented in the following example:

```
Treesize /HTML "D:\HTML\drive-c.html" "C:\" /HTML "D:\HTML\drive-d.html" "D:\"
```

If you want more than one scan to be part of the HTML file, you should add the command line switch /GROUPSCANS. When exporting to HTML without an included image, you could alternatively use the switch /APPENDTOFILES. Without one of these flags, the HTML file will get overwritten.

/IMPORT
<filename>

This option can only be used in combination with the command line option [/SEARCH](#)^[164].

Loads a list of paths into the user interface of the TreeSize [file search](#)^[97]. The file can be in .txt, or .csv format. This parameter can be used to import results of a previous search. The imported files and folders can be moved/copied/deleted/archived, like any "live" search result, using the [file operation dialog](#)^[128].

Example:

```
Treesize /SEARCH /IMPORT "C:\Results\filelist.txt"
```

You can also combine this parameter with the parameter [/MOVETO](#)^[162], to automatically move or delete the files that are contained in the text file. Example:

```
Treesize /SEARCH /IMPORT "C:\Results\filesToDelete.csv" /MOVETO "Recycle Bin"
```

/LISTSEPARATOR
<separator char>

Enables you to define the separator used when exporting text or CSV files. Text files use the tabulator by default, CSV-files the list separator from the regional settings of the Windows control panel. Please specify a single character or the string "TAB" for tabulator after this switch. Examples:

```
Treesize /LISTSEPARATOR ; /TEXT "C:\Results\c.txt" "C:\"
```

```
Treesize /LISTSEPARATOR TAB /TEXT "C:\Results\c.csv" "C:\"
```

/MOVETO
<path|zip file|"Recycle Bin"|executable>

This option can only be used in combination with the command line option [/SEARCH](#)^[164].

It moves the results of a TreeSize [file search](#)^[97] to another location, ZIP file, the recycle bin, or passes them to an executable file as parameter. To move the files to the recycle bin, specify the name of the recycle bin (as seen in the Windows

Explorer) or "Recycle Bin" after the /MOVETO option.

The following command will search on your local drive C: using the latest search options and moves the search results to a ZIP file called "ObsoleteFiles.zip":

```
Treesize /SEARCH:Start /MOVETO "C:\temp\ObsoleteFiles.zip"
"C:\\"
```

This call moves the search results to your system recycle bin instead:

```
Treesize /SEARCH:Start /MOVETO "Recycle Bin" "C:\\"
```

This example will load [saved search options](#)^[100] with the file name "SearchOptions.xml" and move all files that were found to the path "E:\Obsolete Files":

```
Treesize /SEARCH:Start /MOVETO "E:\Obsolete Files"
"SearchOptions.xml"
```

This example uses the same search options, but instead of moving the files it will pass the full file path to your batch file "Archiver.bat". This batch file may e.g. trigger an archiving process for the passed files:

```
Treesize /SEARCH:Start /NOGUI /MOVETO "Archiver.bat"
"SearchOptions.xml"
```

For ZIP files the /DATE parameter can be used to add the current date and time to the ZIP file name.

See also: [Move checked files](#)^[128]

/NOGUI

No window will be shown and the application will not appear in the task bar. Useful to execute scans or searches in background, without visual feedback.

Caution: Use this switch only if you have tested the rest of the command line options because error messages cannot be displayed in this mode.

However, errors will be logged in the Windows event log.

/NOHEADERS

Omits the header lines usually written on top of scan or search export files. This makes it easier to receive plain data for postprocessing.

/NOUNITS

Omits the units usually written after size values. This option in combination with /SIZEUNIT 0 will export plain byte values. This makes it easier to receive plain data for postprocessing.

Please note: This command line will only effect exports of the directory tree, generated by using the /TEXT, /EXCEL, /HTML, /EMAIL, or /PRINT options. /EXTENSIONSlist, /USERSlist, /EXPORTDRIVESlist, or /TOPFILESlist will not be effected.

/OPEN <filename>

Opens a saved [XML report](#)^[18] on application start. Example:

```
Treesize /OPEN "C:\Reports\Drive_C.xml.zip"
```

- /OPTIONS**
<filename> Use this parameter to apply exported user settings to TreeSize. User settings can be exported at "File > Options > Export". Example:
- ```
Treesize /OPTIONS "C:\Temp\User Settings.xml"
```
- Hint: Change as many settings as possible in the user interface before saving the options to reduce the amount of command line parameters you need.
- /PDF** Saves the results to a PDF file after the scan or search is finished. The application will terminate itself after saving. The following example will execute a scan of your local drive C: and save the results to a PDF file:
- ```
Treesize /PDF "C:\Results\C_scan.pdf" "C:\"
```
- /PIECHART**
<filename> Saves the pie chart of the scanned directory to a bitmap, GIF, PNG, or JPEG file. The file type depends on the extension of the specified file name. The following example will scan the drives C: and D: and exports a pie chart for each one in PNG format:
- ```
Treesize /PIECHART "C:\Reports\C_pie.png" "C:\" /PIECHART "C:\Reports\D_pie.png" "D:\"
```
- /PRINT** Prints a report for the scanned directory tree using default printer configured in your system settings. The application will be terminated after printing. Example:
- ```
Treesize /PRINT "\\SERVER\USERS"
```
- /RESTRICTED** Starts TreeSize in a restricted mode in which many features are disabled that are not of interest for "normal" (non-admin) users. Among the disabled features are: Check for Update, Open Software applet of Windows Control Panel, Schedule TreeSize scans, connect network drive, configure Windows System Restore, Run as administrator, exports, and apply NTFS compression. You can supply a path that should be scanned, e.g. the user's home directory, at the command line or using the [Startup Paths](#)^[95] in a saved configuration file. If you additionally pass the command line option **/READONLY**, the user won't be able to delete or move files in TreeSize, so it will be usable as reporting tool only.
- /SCAN**
<filename> Scans all paths that are found in the text file specified after this switch. The text file must contain one path per line. The following example scans all paths that are found in the file "D:\PathsToScan.txt" and writes each scan result to a separate sheet in an Excel File with today's date:
- ```
Treesize /EXCEL "D:\Results\%DATE%.xlsx" /SCAN "D:\PathsToScan.txt"
```
- You may also call TreeSize in a "for" loop with one of the paths only, please find an [example below](#)<sup>[168]</sup>.
- /SEARCH[:<Start|Internet>]** Opens the [File Search](#)<sup>[97]</sup> window of TreeSize. If ":Start" is added to this command line option, the search is started immediately with the last settings. A previously [saved XML file containing search settings](#)<sup>[100]</sup> may be passed, these settings will then be

used to perform the search. Please note that files which are found in this search are automatically checked. The following example performs the search with settings that have previously been saved to the file "SearchSettings.xml" and saves the results to a text file:

```
Treesize /SEARCH:Start /TEXT "T:\SearchResult.txt"
"SearchSettings.xml"
```

If ":Internet" is added to this command line option, it will start searching for [temporary internet files](#)<sup>[99]</sup>. The drives activated during the last regular scan will be scanned, a special set of drives and paths can be specified on the command line (separated with blanks). Example:

```
Treesize /SEARCH:Internet "C:\"
```

Hint: In general, the last search settings or a former saved set of search settings will be used. However, you can specify the search patterns for the [custom search](#)<sup>[120]</sup> using the /FILTER command line option.

**/SHEETNAME <title>** Enables you to specify the name of the sheet that will be added to an Excel file when using the [/EXCEL](#)<sup>[159]</sup> command line switch. Please note that an Excel sheet name must be unique in an Excel file and certain special characters like slashes, backslashes and colons are forbidden. TreeSize will always create a unique sheet name by replacing invalid character with underscores and by adding date and time if necessary.

**/SHORTDATEFORMAT <format>** Alters the short date format for this process, which can be configured in the regional options of the Windows Control Panel. Exports of TreeSize will use this format for date values. Example:

```
Treesize /SHORTDATEFORMAT YYYY-MM-DD /TEXT "D:\export.txt"
"E:\"
```

**/SIZEUNIT <n>** This option can be used to specify the unit to be used for displaying size values: N can have the values 0 to 5 which mean: 0 = Bytes, 1 = KB, 2 = MB, 3 = GB, 4 = TB, 5 = Automatic Units. Without this option the last used configuration in TreeSize will be used.

**/SORTBY <ColumnName>** Enables you to specify by which value the generated exports will be sorted. Possible values are column names like "Size" or "Name". The last used sort type in the TreeSize user interface will be used by default. Example:

```
Treesize /SORTBY Size /TEXT "D:\export.txt" "E:\"
Treesize /SORTBY Name /EXCEL "D:\export.xlsx" "E:\"
```

**/SUBJECT <subject>** This option allows you to customize the subject that will be used for emails that are sent at the end of the scan. Example:

```
Treesize /EMAIL treesize@example.com /SUBJECT "TreeSize
Professional Scan Report" "\\Server\Share"
```

**/TEXT**  
**<filename>** Saves the results to a text or CSV file after the scan or search is finished. The application will terminate itself after saving. The following example will execute a scan of your local drive C: and save the results to a text file:

```
Treesize /TEXT "C:\Results\C_scan.txt" "C:\"
```

This example will save the results of a File Search on your local drive C: with the last search configurations to a CSV file:

```
Treesize /SEARCH:Start /TEXT "C:\Results\C_search.csv" "C:\"
```

**/TITLE**  
**<title>** Can be used to change the scan title in a printed report or exported file. This allows you to supply additional information to the user when using TreeSize in an automated environment. The use of environment variables is allowed. Example:

```
Treesize /TITLE "This is drive C on Server3" /PRINT "\Server3\C$"
\Server3\C$"
```

The title will be applied only to scans which appear after this options on the command line. Multiple /TITLE flags are allowed to apply separate titles to different scans.

**/TOPFILES**  
**LIST**  
**<filename>** This option enables you to save the contents of the Top 100 list to an Excel, HTML, Text, or CSV file. The file type depends on the extension of the specified file name. Example:

```
Treesize /TOPFILES LIST "C:\Temp\C_top_files.txt" "C:\"
```

**/TREEMAP**  
**<filename>** Saves the treemap of the scanned directory tree as bitmap, GIF, PNG or JPEG file. The file type depends on the extension of the specified file name. Example:

```
Treesize /TREEMAP "C:\Dokumente\treemap.jpg" "C:\"
```

**/USERSLIST**  
**<filename>** This option enables you to save the statistics showing the results grouped by username to an Excel, HTML, Text, or CSV file. The file type depends on the extension of the specified file name. The exported columns will be those that were enabled in the user interface on the tab "Users" when it was last used, or at the time when the configuration file supplied via [/OPTIONS](#)<sup>164</sup> was written.

The following example scans drive C: and creates an Excel file in "C:\Temp" with the statistics of the users on this drive:

```
Treesize /USERSLIST "C:\temp\C_users.xls" "C:\"
```

**/USERNAME**  
**<username>** Specifies the username that should be used to authenticate for the scans. Use /PASSWORD to specify a password for this username. It is recommended to instead use the Microsoft tool [RUNAS](#).

**/USERFILTER**  
**<username>** With this option only files owned by a certain user will be taken into account when scanning. Provide the name of this user after this switch. Please note that you cannot use multiple user names here, but the wildcards "\*" and "?" are supported. Example:

```
Treesize /USERFILTER miller "\\Server\GroupDrive"
```

- /USERSCHART** **<filename>** Saves the small graph shown on the bottom of the "[Users](#)"<sup>[47]</sup> page to an image file (bitmap, GIF, PNG, or JPEG).
- /USERSPIECHART** **<filename>** Saves a pie chart that shows the "[user statistics](#)"<sup>[47]</sup> of the current scan to an image file (bitmap, GIF, PNG, or JPEG).
- /MEWTYPE** **n** Defines on which values the "Percent of Parent", the "Growth" columns and the "Age of Files" chart are based. Possible values are:
- 2: Size
  - 3: Allocated Space (Size on disk)
  - 7: Number of Files
- /XML** **<filename>** Saves the scan results to a XML file that can be loaded for comparisons at a later date. Example:
- ```
Treesize /XML "C:\Results\Allusers.xml.zip" "H:\users\"
```
- This option can be combined with the /EXPAND switch to limit the exported directories.
- Please note:** When loading a limited XML export to TreeSize, you cannot navigate through the complete directory branch, but only the exported directories.
- SCANPATH** At the end of the command line, you may pass one or more paths that should be scanned by TreeSize. Several paths are separated using a blank. Paths containing a blank has to be quoted ("). Example:
- ```
Treesize "C:\Program Files\" "C:\Windows"
```
- The wildcards "\*" and "?" are allowed. Example:
- ```
Treesize "H:\users\A*"
```
- To start one instance for each folder, you may use the Windows "for" command like this:
- ```
for /D %i in (H:\Users\A*) do @start /w Treesize.exe %i
```

In case an error occurs, it will be returned as Windows error code in the exit code of the process. Environment variables (e.g. %APPDATA%) can be used in filenames for the export as well as in the scanned paths.

## Scanning Multiple Directories

If you need to scan multiple directories, it might be a good idea to merge several calls in a Batch file, for example:

```
START /WAIT "TreeSize" "C:\Program Files\JAM Software\TreeSize Professional\Treesize.exe" /EXCEL "D:\Share1.xls" "\\Server\Share1"
START /WAIT "TreeSize" "C:\Program Files\JAM Software\TreeSize Professional\Treesize.exe" /EXCEL "D:\Share2.xls" "\\Server\Share2"
START /WAIT "TreeSize" "C:\Program Files\JAM Software\TreeSize Professional\Treesize.exe" /EXCEL "D:\Share3.xls" "\\Server\Share3"
```

The command "START /WAIT" ensures that the jobs start sequentially. Not starting the jobs parallel is usually better because a single job takes more advantage from caches and system resources. It is also possible to store the shares that should be scanned in a text file and use the Windows "for" command like this:

```
FOR /F %%p IN (Paths.txt) DO START /WAIT Treesize.exe /EXCEL "c:\temp\TreeSize-Reports-%DATE%.xls" "%%p"
```

```
FOR /F "tokens=1" %%i IN (Shares.txt) DO START /WAIT Treesize.exe /EXCEL "c:\temp\%%i.xls" "\\Server\%%i"
```

**Please note:** The double percent characters are required in batch files, on the command line use a single percent only.

### Scheduled Start

You can use the Windows Scheduled Tasks to run TreeSize with certain command line options daily, weekly, or monthly at a certain time. The ["Schedule Dialog"](#)<sup>145</sup> of TreeSize will help you setting up a scheduled task.

You can also use the "SHTASKS" command to perform scheduled scans. If you, for example, want to scan the drives C: and E: next night at 03:00 a.m. and save the results to an Excel file, you could use the following command line:

```
SCHTASKS /Create /SC DAILY /ST 03:00 /TN TreeSizeScan /TR "'C:\Program Files\JAM Software\TreeSize\Treesize.exe' /EXCEL C:\Temp\tsp.xls /EXPAND 2 C:\ E:\"
```

Get help about the "SHTASKS" command on [Microsoft's pages](#) or by typing:

```
SCHTASKS /Create /?
```

**Please note:** Error messages occurring during scheduled scans are listed in the systems Windows event log.

### PowerShell

Windows PowerShell can be useful in combination with TreeSize. This example shows how to search a couple of remote computers that are queried using an LDAP query in the Active Directory (AD):

```
$computer = Get-ADComputer -SearchBase "ou=client
computers,ou=intranet,dc=intranet,dc=jam-software,dc=com" -Filter *
foreach ($comp in $computer.name)
{
 $path = "\\$comp\C$\Windows"
 Add-Content Scan.txt "$path"
}
#debug
Get-Content -Path Scan.txt
start TreeSize with the collected paths
&"C:\Program Files\JAM Software\TreeSize
Professional\Treesize.exe" /SEARCH:Start /SCAN Scan.txt /FILTER
*.exe /Export FoundFiles.txt
```

### Windows Scripting Host

If you intend to use the Windows Scripting Host (WSH), your command to start TreeSize will look like:



```
Set Shell = CreateObject("WScript.Shell")
Shell.Run """C:\Program Files\TreeSize Professional\Treesize.exe" /XML
"C:\Reports\drive_c.xml.zip" """C:\"""
```

### Exit Codes

If the operation was completed successfully, the exit code is 0. If an error occurred TreeSize will return a [Windows error code](#) as exit code if available, or 1 to indicate a general error. In any case the Windows Event Log will contain further information in the "Application" log, Event Source "TreeSize".

## 8.3 How to schedule a file search

Like the main module, the TreeSize File Search can also be scheduled as a task, that runs at certain times. The general approach to create such a task is to set up a search in the user interface and then selecting ["Tools > Schedule current search"](#)<sup>105</sup> from the ribbon menu.

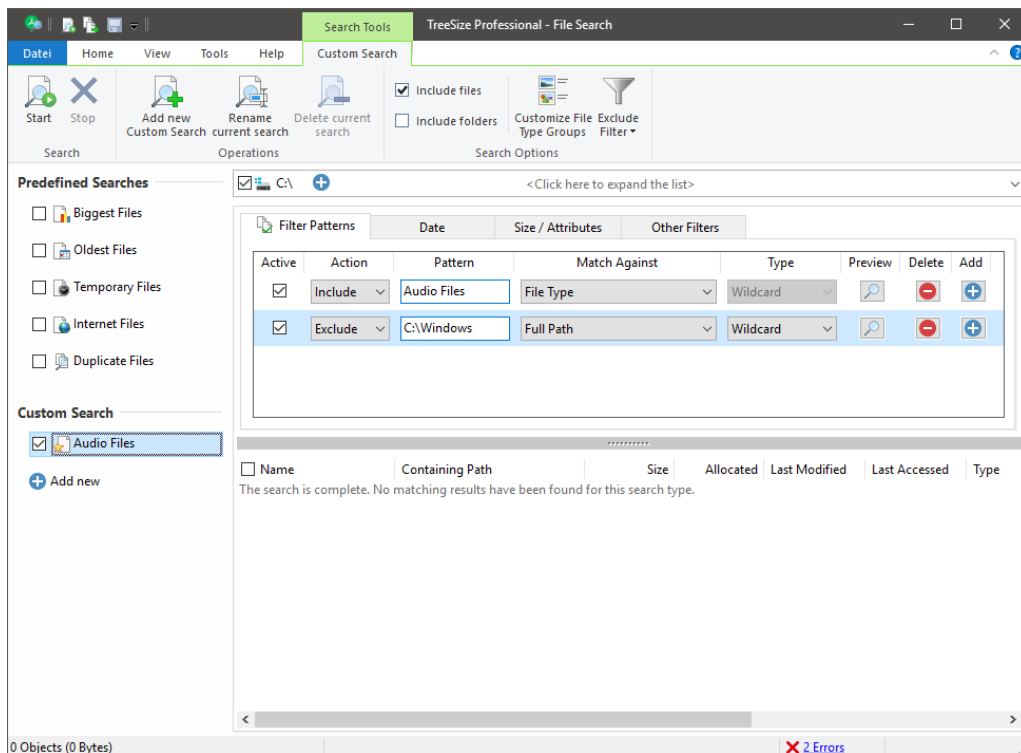
The following description shows an example configuration and demonstrates the different steps that are necessary to create your own, customized search task.

### Step 1: Set up a search via user interface

The file search offers a vast variety of different options that can be customized to your specific use case. The first step in creating a task is to set up either one of the predefined search types, or to create a new [custom search](#)<sup>119</sup>. Any combination of options, including the selection of multiple different searches, is possible.

### Step 2: Execute the search and check the results

Once you have set up the search, it is best to execute it and validate that it returns the desired results. The more specific a search is, the more likely it is that you need to do a bit of tweaking to ensure that only the results are returned that match your given use case. The following example will return all audio files on drive C:\, except those that are located within the Folder C:\Windows:



### Step 3: Create a task with the current search settings

The final step is to open the [schedule dialog](#)<sup>[145]</sup>, using the option "[Tools > Schedule current search](#)"<sup>[105]</sup> from the ribbon menu. At this point, TreeSize will automatically take your current search parameters and create an option file that represents the search that was just set up. Under "[Options](#)"<sup>[146]</sup>, you can see that the file was automatically included to the task.

**Please note:** Any previous selection that was made in the "[File operation](#)"<sup>[128]</sup> dialog, such as the creation of a log file, or the different "Move options" will be added to the options file as well. If you add any type of file operation to the task, it will use these settings as well.

After setting up the task with the desired schedule options and defining export or move operations, you can review the [command line parameters](#)<sup>[156]</sup> under "Command Line". Here, you can also test the current task, copy its parameters to the clipboard, or create a batch file.

Once everything is set up, click "Save Task" and enter your credentials, to create a new task and add it to Windows' task library.

## 8.4 How to schedule a move or delete operation

This chapter explains how you can set up a search that automatically moves all files and folders that were found to another location. This also applies if you want to delete, archive, or copy the search results with the help of an automated task, or batch file.

The basic steps that are required for the creation of an automated search can be found in [the previous chapter](#)<sup>[169]</sup>. The same steps are needed, if you want to

create a task that automatically moves the search results. However, the main difference is, that you need to define the move options that should be used, before scheduling the task. Possible options include the creation of a log file, an undo script, or whether or not you want to use the same directory structure when moving files, that they had in their original location.

These options can be changed under "Home > Move items". The "move" dialog not only allows to trigger the actual operation, but it also contains a section with possible settings that are applied to move operations in general. Make sure to apply your preferences in the groups "Move Options" and "Logging":

Choose Destination

Choose a destination and configure the options.

- No items have been checked.-

**Move Operation**

☐ Move items to Recycle Bin  
☐ Delete items from disk  
☐ Move items to ZIP file  
☐ Pass items to executable as parameter  
☒ Move items to path

Destination: C:\Users\ACS-RA~1\AppData\Local\Temp\ObsoleteFiles

**Move Options**

☒ Skip existing files  
☐ Leave shortcut at original location pointing to new location  
☐ Delete empty directories after the operation  
☐ Preserve permissions of the original items  
☒ Preserve directory structure, starting from level: 0

**Logging**

☐ Log performed operations to:  
☐ Create Undo script (if possible):

Help Execute Cancel Save & Close

After choosing the desired options, click "Close" to dismiss the dialog and apply the selected settings.

If you select "[Schedule current search](#)<sup>[105]</sup>" to open the scheduler at this point, TreeSize will automatically generate a settings file with your current search configuration, including the previously selected move options. Under "[Move Operation](#)<sup>[150]</sup>", you can then select the operation that you want to perform (delete, move, copy, or archive).

## 9 Tips & Annotations

- Especially scans of larger network drives may take a long time. With the Professional Edition you may perform such scans overnight using [Scheduled Scans](#)<sup>[145]</sup> and save the results to a XML file which can be loaded again later.
- Use the [TreeSize File Search](#)<sup>[99]</sup> to find obsolete files on your hard drives.
- TreeSize supports drag&drop file system operations in many places.
- For continuous analyzing of disk usage on large servers we recommend our product **SpaceObServer**. It collects the data using a background system service and stores it in a SQL database. It uses less RAM than TreeSize, and the reporting capabilities are more flexible because it is built on a database. More information is available at <https://www.jam-software.com/spaceobserver/>

### 9.1 Notes on NTFS

The file system NTFS can be used with the operating system Windows NT or later. It offers some special features which also have effects for TreeSize. We will describe some of these features and their impacts on this software in the following paragraphs.

#### Access Control Lists

The way users can access files and folders can be restricted. One can grant or deny other users or groups certain rights like reading, writing, executing or deleting. That way one can even deny administrators to access files and folders. If an administrator tries to access a folder in the Windows Explorer to which the owner denied any other users reading access, an "Access Denied" error message will be displayed. However, TreeSize is able to scan such folders, if you are logged in as administrator or as a user that has the right to perform backups (This option can be changed at "Control Panel > Administrative Tools > Local Security Policy" and with the user editor of Windows).

#### File Based Compression

NTFS supports compression on an individual file basis. Files that are compressed on an NTFS volume can be read and written without first being decompressed by another program. Decompression happens automatically and transparently during the reading of the file. The file is compressed again when it is saved.

The space occupied by a compressed file is usually much smaller than its normal size. As a consequence, for folders that are partially or completely

compressed, the allocated space reported by TreeSize may be smaller than the size reported for this folder. TreeSize is able to show the compression ratio in an extra column on the "Details" tab. Additionally it can show compressed files and folders in a different color. These features can be turned on or off in the [Options](#)<sup>[66]</sup> dialog.

TreeSize is able to compress and decompress entire file system branches using the context menu.

In Windows 10 Microsoft introduced new transparent compression-features in NTFS, designed to compact the files of the operating system, mainly DLL and EXE files. In contrast to old file based compression, these files are not flagged as compressed in their file attributes.

### Sparse Files

Files which are large but only partially used are called [sparse files](#). Because the operating system does not allocate disk space for the unused parts of a sparse file, it occupies less disk space than its actual size is. TreeSize treats sparse files like compressed files and also calculates the compression ratio for them.

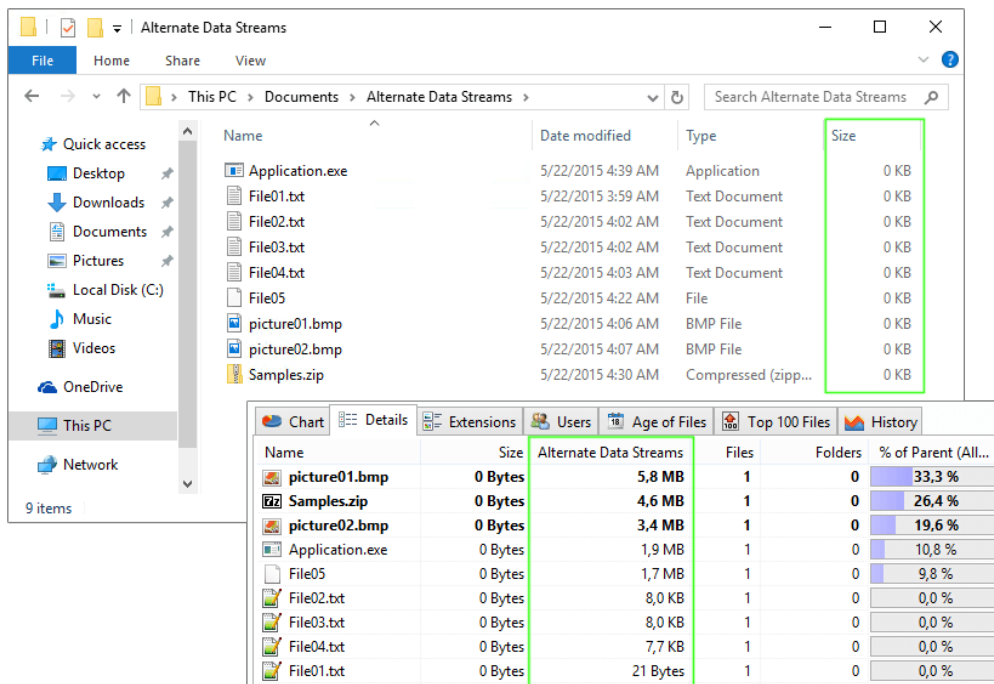
### Reparse Points: Volume Mount Points and Symbolic Links

A volume mount point is an existing path where you "mount" another volume. Given this, users and applications can refer to the mounted volume by that path. There is no need to assign a drive letter to this volume. It allows you to unify multiple file systems into one logical file system. Symbolic links, also known as junction points, work similar: If you for example have an empty folder "C:\Documents\Images", you can create a symbolic link to "E:\Pics" for it. Applications will then see the content of "E:\Pics" in "C:\Documents\Images". Unlike an NTFS junction point a symbolic link can also point to a file or remote SMB network path.

If the [Option](#)<sup>[62]</sup> "Follow Mount Points and Symbolic Links" is turned on, TreeSize will include the contents of these folders when scanning. Since they are not physically stored on the drive you are scanning, this may produce results for the allocated space that are larger than the total size of the drive.

### Alternate Data Streams (ADS)

In NTFS, a file consists of different data streams. One stream holds the security information (access rights and such things), another one holds the "real data" you expect to be in a file. There may be alternate data streams, holding data the same way the standard data stream does. These alternate data streams are hidden. That means that you can have a file with 1 byte in the official main data stream and some hundred MB in one or more alternate data streams. The dir command, file managers or windows explorer will show 1 byte as the size of this file, but it actually allocates much more space on your hard drive.



TreeSize can detect alternate data streams and add their sizes to the allocated file size.

Please note: ADS may store information in the same cluster as the main data stream, so if a file has one or more ADS, this file does not necessarily allocate more disk space.

You can choose to detect alternate data streams, to get a more accurate allocated space of directory branches, in the TreeSize [Options](#)<sup>[62]</sup> dialog. This option is deactivated by default, because querying the ADS takes some time and increases the overall time needed for a scan. You can search for files containing alternate data streams using the Custom File Search of TreeSize.

## Hardlinks

In a Windows environment a hardlink is a reference, or pointer, to physical data on a NTFS storage volume. All named files are hardlinks. The name associated with the file is simply a label that refers the operating system to the actual data. On NTFS volumes, more than one name can be associated with the same data. Though called by different names, any changes made will affect the actual data, regardless of how the file is called at a later time. Hardlinks can only refer to data that exists on the same file system. The data is accessible as long as at least one link that points to it exists. When the last link is removed, the space is considered free. Please note that all hardlink pointing to the same file share also the same Security Descriptor (access permissions).

To create a hardlink, the user must have write permissions for file attributes on the respective folder branch and on the share, if the drive is not a local drive.

If more than one hardlink points to a file's data, the space is allocated only once by these files, no matter how many hardlinks exists. In the [Options](#)<sup>[62]</sup> dialog you can tell TreeSize to detect hardlinks, to get a more accurate allocated space of directory branches. This option is deactivated by default, because

querying the hardlinks takes some time and increases the overall time needed for a scan.

The TreeSize File Search uses the hardlinks to remove redundant file content of duplicate files. Use the "[Deduplicate](#)<sup>[115]</sup>" function to remove duplicate files by using hardlinks. This will reduce the allocated space of your hard disk.

### Automatic Data Deduplication

Windows Server 2012 and later offer a data deduplication feature: The data deduplication segments files with fractionally equal content into so-called "chunks" which are moved into the subfolder "System Volume Informaton\Dedup\ChunkStore\" located on the corresponding NTFS partition. After the deduplication has been applied by Windows, the original data is replaced by a pointer to the corresponding chunk in the ChunkStore directory. After they have been deduplicated by the NTFS deduplication two identical files will only require half of the disk space they occupied before. Since the original files now only contain a small pointer instead of the data, the allocated disk space will be indicated by Windows with a much smaller value than before (for two identical files the occupied disk space would be indicated as "0 Byte"). To make TreeSize show the original file and folder sizes, simply switch the view mode from "Allocated Space" to "Size". The "Allocated Space" shown in TreeSize is the disk space you would obtain by deleting the corresponding file.

### Offline Files

Windows Server and some 3rd party tools and appliances offer a feature called "offline files": Files that have not been used for a long time will be automatically moved to cheaper and slower storage, and a small stub file remains at its original location. Usually TreeSize reports the allocated space of such a stub file correctly, which is often only the size of one file system cluster.

There is however one situation in which the allocated space for stub files may not be reported correctly. In case TreeSize runs into Access Denied errors, it uses Windows API functions intended for backup software in order to be able to scan also those parts of the file system and provide values for their size and allocated space. We have seen some appliances which reported the full file size as allocated space in this case for the stub files, most likely because this would be the size occupied in a backup. To avoid this, ensure that the user which runs the scans has full read access to the scanned file system and check this [FAQ entry](#)<sup>[10]</sup>.

## 9.2 Wasted Space

The wasted space is the amount of space in clusters on your hard disk that are not entirely filled. This is the last (or only) block of a file. The FAT32 file system may have very large cluster sizes, depending on the partition size.

| FAT32          |                      |
|----------------|----------------------|
| Partition Size | Default Cluster Size |
| 01 - 08 GB     | 4 KB                 |
| 08 - 16 GB     | 8 KB                 |
| 16 - 32 GB     | 16 KB                |
| >32 GB         | 32 KB                |

If you have a FAT32 with a size of 32GB or more, a cluster size of 32KB will be used on it. If you store 10 files of 1 KB on this partition, this would use  $10 * 32\text{KB} = 320\text{KB}$  of disk space, and  $320\text{KB} - 10\text{KB} = 310\text{KB}$  would be wasted. Especially a huge number of small files significantly increases the amount of wasted space on FAT32 partitions.

To reduce the wasted space, you can format your hard disk with the [NTFS file system](#)<sup>[172]</sup>. It usually operates with a cluster size of 4KB and so stores small files more effective.

## 9.3 Regular Expressions

Regular expressions describe patterns in strings and can be used i.a. to determine whether a given pattern occurs in a text or not. In TreeSize regular expressions can be used to find specific files and / or folders that match the criteria specified by regular expressions

The following table shows some examples:

| Expression                   | Syntax | Description                                                                                                                                                  | Example                                                                                                                                                     |
|------------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Any character                | .      | Matches any single character except a line break.                                                                                                            | <b>a.o</b> matches "aro" in "around" and "abo" in "about" but not "acro" in "across".                                                                       |
| Zero or more                 | *      | Matches zero or more occurrences of the preceding expression, and makes all possible matches.                                                                | <b>a*b</b> matches "b" in "bat" and "ab" in "about".<br><b>e.*e</b> matches the word "enterprise".                                                          |
| One or more                  | +      | Matches at least one occurrence of the preceding expression.                                                                                                 | <b>ac+</b> matches words that contain the letter "a" and at least one instance of "c", such as "race", and "ace".<br><b>a.+s</b> matches the word "access". |
| Beginning of word            | <      | Matches only when a word starts at this point in the text.                                                                                                   | <b>&lt;in</b> matches words such as "inside" and "into" that begin with the letters "in".                                                                   |
| End of word                  | >      | Matches only when a word ends at this point in the text.                                                                                                     | <b>ss&gt;</b> matches words such as "across" and "loss" that end with the letters "ss".                                                                     |
| Any one character in the set | []     | Matches any one of the characters in the []. To specify a range of characters, list the starting and ending characters separated by a dash (-), as in [a-z]. | <b>be[n-t]</b> matches "bet" in "between", "ben" in "beneath", and "bes" in "beside" but not "bel" in "below".                                              |



|                                      |               |                                                                                                                                                                            |                                                                                                                                                    |
|--------------------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Any one character not in the set     | <b>[^...]</b> | Matches any character that is not in the set of characters that follows the ^.                                                                                             | <b>be[^n-t]</b> matches "bef" in "before", "beh" in "behind", and "bel" in "below", but not "ben" in "beneath".                                    |
| Or                                   | <b> </b>      | Matches either the expression before or the one after the OR symbol ( ). Mostly used in a group.                                                                           | <b>(sponge mud)</b> matches "sponge bath" and "mud bath".                                                                                          |
| Tagged expression (or backreference) | <b>\</b>      | Matches the character that follows the backslash (\) as a literal. This lets you find the characters that are used in regular expression notation, such as { and ^.        | <b>\^</b> searches for the ^ character.                                                                                                            |
| Markierter Ausdruck                  | <b>{ }</b>    | Matches text that is tagged with the enclosed expression.                                                                                                                  | <b>{does}n't</b> identifies the text that precedes the replacement in the replace string \1 not to change every occurrence of doesn't to does not. |
| Repeat n times                       | <b>^n</b>     | Matches n occurrences of the preceding expression.                                                                                                                         | <b>[0-9]^4</b> matches any 4-digit sequence.                                                                                                       |
| Grouping                             | <b>()</b>     | Lets you group a set of expressions together. If you want to search for two different expressions in a single search, you can use the Grouping expression to combine them. | If you want to search for <b>[a-z][1-3]</b> or <b>[0-9][a-z]</b> , you would combine them: <b>(([a-z][1-3]) ([0-9][a-z]))</b> .                    |

Further examples:

|                       |                                                             |
|-----------------------|-------------------------------------------------------------|
| <b>[0-9] or \d</b>    | Find all files/folders with at least one digit in its name. |
| <b>a b</b>            | Find all files/folders containing "a" or "b" in their name. |
| <b>(?=.*a)(?=.*b)</b> | Find all files/folders containing at least one "a"          |

|                                             |                                                                                                                                       |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|                                             | character and one "b" character.                                                                                                      |
| ((?=.*help))(*?=.*online))<br>(*?=.*readme) | Find all files/folders containing the words 'help' and 'readme' or 'online' and 'readme'.                                             |
| [^(A-Za-z)]                                 | Find all files/folders containing at least one other symbol than a character in their name.                                           |
| ^E[0-9]{7}\$                                | Find all files/folders which start with an "E" followed by exactly 7 digits.                                                          |
| C:\\Windows\\[^\\]*\\.\\[^\\]*\$            | Find all files/folders whose parent folder is "C:\\Windows".                                                                          |
| [A-Za-z]:\\([\\^\\]+\\){2,4}[^\\]+\$        | Find all files/folders with a folder depth of at least 2 and at most 4.                                                               |
| [^\\x00-\\x7F]                              | Find all files/folders with invalid ASCII characters.                                                                                 |
| [^\\P{C}]                                   | Find all files/folders with Unicode characters which cannot be printed.                                                               |
| [\\xA0]                                     | Find all file/Folder names that contain the non-breakable space character (Unicode NOBR, U+00A0) instead of a normal space character. |
| [~,\"#,%,&,\"*,:,<,>,\\? ,V,\\, {, ,}]      | Find all files and folders, that contain characters in their name which are invalid on <b>SharePoint</b> servers.                     |

Further information and additional examples can be found [here](#).

A description of all special characters that can be used with regular expression can be found [here](#).

For further help in forming regular expressions following tools can be used:

<http://gskinner.com/RegExr/> (online)

<http://regexpal.com/> (online)

<http://sourceforge.net/projects/regexpeditor/> (download)

<http://sourceforge.net/projects/regextester/> (download)

<http://sourceforge.net/projects/regaxe/> (download)

## 9.4 Translations

We are proud of the popularity of our award-winning disk space management software TreeSize and would love to offer it to everyone in her/his native language. In this way, all our worldwide users can enjoy localized TreeSize software with ease. TreeSize is already available in **German** and **English**. Thanks to the help of our great volunteer translators we are able to provide these translations:

**Greek:** Thanks to GeoVasi69, and Prodromos Makridis

**Spanish:** Thanks to MS-PC, J. M. Fustero, and Pichifino

**French:** Thanks to Alexandre Mongin, David Dissard, Ignace Le Roux, and Gaillard S-G, and others

**Japanese:** Thanks to Kyotaro Iijima, Sriram Iyer, and Tetsuro Shimazaki

**Dutch:** Thanks to Kees Bakker, Linda Bijlsma, Jaap Kramer, Leroux, and others

**Portuguese:** Thanks to Ian Lima Souza, Maria Pombo, and Carlos Figueiredo

**Russian:** Thanks to kopejkin, Polina Morgan, Alexander Vorfolomeev, Temtaime, Gennady Morozov, and others

**Slovenian:** Thanks to Boštjan Pecovnik, Jadran Rudec, and one other unnamed translator

**Ukrainian:** Thanks to kopejkin

Would you like to help us translate TreeSize to your language? Please find more information [online](#).

## 10 Copyright & Contact

Copyright ©1995-2020 by Joachim Marder e.K.

JAM Software GmbH  
Am Wissenschaftspark 26  
54296 Trier

Germany

FAX: [+49-651-145653-29](tel:+49-651-145653-29)

WWW: <https://www.jam-software.com>

Support: <https://www.jam-software.com/customers/contact.php>

Email: [TreeSize@jam-software.com](mailto:TreeSize@jam-software.com)

Commercial registerHRB: 4920 (AG Wittlich)  
number:

VAT ID No.: DE234825349

Managing Director: Joachim Marder

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