

TreeSize

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test. buy. enjoy.

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Overview

1 Overview

TreeSize is a powerful and flexible hard disk space manager for Windows 10/8/7/Vista/XP or Windows Server 2016/2012/2008/2003 (32 or 64 Bit).

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 <u>file search</u> 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 dragand-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.

<u>Take a visual tour</u> or read our <u>product data sheet</u> to learn how to manage disk space with TreeSize.

Installation

2 Installation

To install TreeSize, execute the setup file and follow the instructions. TreeSize requires Windows XP or upwards as well as the .Net framework 4.0, which will be installed automatically when missing (Information regarding disk space management on other operating systems can be found on: <u>http://www.folder-sizes.com</u>). 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 "Tools" [37].

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 <code>YourInstallKey</code> with the installation key that you received after your registration. Using <code>/VERYSILENT</code> instead of <code>/SILENT</code> will prevent any visual feedback. The option <code>/DIR="x:\dirname"</code> can be used to override the default install path.

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"

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 <u>Orca</u>.

Quickstart

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 33" tab containing commonly used functions and elements, or the "View 38" 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 <u>Directory Tree</u> [42] of the scanned folder or drive provides an . immediate overview of the size of each folder.
- 4 The <u>Drive List</u> 60 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 "<u>Chart</u>[45]" view visualizes folder information either as a "<u>Pie</u> <u>Chart</u>[47], "<u>Bar Chart</u>[48]" or as a "<u>Tree Map</u>[49]".
- The "<u>Details</u> 50" view will provide you **detailed information on all files** and **folders** contained in the current selected item in the <u>Directory</u> <u>Tree</u> 42
- The "<u>Extensions</u> [52]" 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 "<u>Users</u> [53]" view shows information on size grouped by users. You will see at a glance which user uses how much space in which folder.
- The "<u>Age of Files</u> 55" view shows the distribution of the **age of scanned files**, based on a certain date attribute.
- The "<u>Top 100 Files</u> 57" view lists the **100 largest files** in the scanned path along with several other details.
- The "<u>History</u> 58" view shows changes in for the scanned path in a line chart.

7 The <u>Quick Access Toolbar</u> [32] is a customizable shortcut to many useful . functions of TreeSize.

What's New

4 What's New

See What's New online

FAQ

5 FAQ

5.1 General / Registration

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

A: TreeSize runs on any Windows operating system from Windows XP / Windows Server 2003 (**32 bit and 64 bit** editions) on. The latest patches should be installed. There are no additional system requirements. The Personal Edition does not run on Windows server systems!

Q: Does TreeSize support Unicode?

A: Yes, all parts of TreeSize support Unicode.

Q: Is TreeSize able to delete readonly files?

A: If you start TreeSize with administrative privileges, it will try to delete writeprotected 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").

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

A: For questions regarding prices please have a look at our <u>price list</u> and our <u>ordering FAQ</u>.

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

- A: The Personal Edition has the same features as the Professional Edition, except that it does not support Windows Server systems, network drives in Windows domains, scheduled scans, and command line options. Besides this, the Personal Edition is available as 32-Bit edition only while the Professional edition is also available as 64-Bit application.
- 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 at http://www.jam-software.com/customers/. 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.

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 <u>customer area</u> 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:

You did not download and install the full version from our <u>customer's area</u>
 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" tab 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 <u>customer area</u>. 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: If <u>Samba</u> 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 <u>NFS</u>, then it can be accessed if the NFS support for Windows is installed. For Windows XP/2003 please install the <u>Windows</u> <u>Services for UNIX</u>, which include an NFS client. For Windows 7 (Professional and Ultimate) and Windows 8 (Enterprise) 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:

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

 $\label{eq:local_machine} \end{tabular} $$ HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\ClientForNFS\CurrentVersion\Defa ult\AnonymousUid as DWORD with the decimal value 10011.$

 $\label{eq:local_machine} \end{tabular} \\ \texttt{MKEY_LOCAL_MACHINE} OFTWARE \end{tabular} \end{tabular} \\ \texttt{ult} \end{tabular} \\ \texttt{as DWORD with the decimal value 10012.} \\ \end{aligned}$

- Q: Is it possible to monitor specific folders and get notified if their permissions change?
- A: With our monitoring tool <u>Server Sentinel</u>, this is possible. It is designed to monitor local resources, as well as server and network services automatically. For more information about <u>this</u>, and other available features, please visit our <u>website</u>.

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: The Windows Explorer and the TreeSize <u>drive list</u> of do show the space that is *physically allocated on the drive* while TreeSize shows the space that is occupied by all files *under a certain path*. Please make sure that you have the view option "<u>Allocated Space</u> 38" activated when you are interested in the physically allocated space.

Another possibility is that not all parts of the drive could be scanned due to <u>access restrictions</u> 157]. Therefore it is highly recommended to run TreeSize as administrator. If you want to get notified if a folder cannot be scanned, please open the options dialog (File > Options) and enable "Show error messages during scan" under the option page "Scan > General". Turning on the Option "Track NTFS specific features" in the <u>Options dialog</u> [67] may result in more accurate results, because it racks e.g. hardlinks, but slows down scans. If a drive letter points to a sub-folder of a network drive, the allocated space (correctly) reported by TreeSize may also be much smaller than the physically allocated space on this drive reported by the Windows Explorer because possibly the whole drive is not accessible through the network.

Beyond the space that is needed for storing the files itself, additional space is used for storing management data like the File Allocation Table of the file system or the boot sector. It is not possible to free this space with TreeSize or any other tool. This is usually 0.5 - 2% of the occupied space.

Another possibility is that you are using a Software RAID - like Windows offers it - which spreads the data with redundancy over several disks. These disks will appear as one logical volume and the failure of a single disk will not cause any data loss. But for storing the redundant information additional space is needed, which cannot be used <u>for</u> user data.

A special characteristics of <u>Offline Files</u> can lead to wrong values for the allocated space of stub files. To avoid this, either ensure that the user which runs the scans has full read access to the scanned file system.

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 <u>user statistics</u> and/or the <u>file age statistics</u> and/or the <u>file age statistics</u> in the <u>Options</u> of dialog. For large server our product <u>SpaceObServer</u> 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 15.

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 and menu bar.

- Enable "Linked Connections" as described here: <u>http://www.jam-software.com/knowledgebase/6898</u>

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 <u>Options</u> 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 with the 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: <u>http://www.jamsoftware.com/spaceobserver/</u>

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 <u>command line</u> [145].

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 <u>Options</u> 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 <u>Custom File Search</u> to search files of certain users.

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

A: Yes, please see chapter "Installation 8".

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

A: You can for example apply a <u>filter</u> [67] for a scan in the <u>Options</u> [69] by adding patterns like *.bmp as include filter. A second possibility is to enable the "Create Statistics on File Extensions" feature in the <u>Options</u> [67]. This will provide a detailed statistics for the file types in each sub-tree on the "<u>Extensions</u> [52]" 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 <u>Custom File Search</u> [115] of

the File Search Module of TreeSize. Our product <u>SpaceObServer</u> 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 <u>SpaceObServer</u> 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.
- Q: TreeSize shows incorrect number of hardlinks for files, stored on a network share. What can I do?
- A: With Windows Vista / Server 2008 Microsoft introduced "Client Caches" with the SMB2 protocol in order to speed up the queries about gathering file and directory meta information on network drives. This approach helps also to utilize the available network bandwidth more efficient. However, these caches do always return an incorrect value for the NTFS hardlinks (always shown as "1").

The responsible caches can be disabled by the following steps:

Open

1. Run "regedit.exe".

2.

the

path

"HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\LanmanWo rkstation\Parameters".

3. Choose "New > DWORD value" in the right click menu and set the name to "FileInfoCacheLifetime" and the value to "0".

4. Restart Windows

After these steps TreeSize should work properly with hardlinks. For further information about client cahces please visit <u>http://technet.microsoft.com/en-us/library/ff686200(WS.10).aspx</u>

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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 <u>scheduled scans</u> 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 > <u>Options</u> [67] > 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 <u>TreeSize File Search</u> 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 <u>custom search</u> type and there add "*.XYZ" to the "Filter Patterns" that should be matched, then press the "Start" button. Another possibility: Set a <u>filter</u> [69] 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 <u>SpaceObServer</u>, 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 <u>custom search</u> [115] 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 "<u>Oldest Files</u>]" search type or the <u>custom</u> <u>search</u>]" search 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 <u>scheduled TreeSize task</u> 134, which allows you to create a scheduled task or to compile and copy the full command line with all necessary <u>command line options</u> 145.

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 <u>Custom Search</u> 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 e 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 <u>Custom</u> <u>Search</u> 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" ans "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 114, TreeSize replaces duplicate files by hard links 159, 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 60" 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 11 make sure that the option "Track NTFS alternate data streams and NTFS hardlinks 67" is turned on in the Options dialog 67.

Q: Does TreeSize allow to search for directories?

A: Yes. You can use the <u>Custom Search</u> 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 <u>custom search</u> 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".

Using TreeSize

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 33" tab containing commonly used functions and elements, or the "View 38" 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 <u>Directory Tree</u> [42] of the scanned folder or drive provides an . immediate overview of the size of each folder.
- 4 The <u>Drive List</u> ⁶⁰ 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 "<u>Chart</u>[45]" view visualizes folder information either as a "<u>Pie</u> <u>Chart</u>[47], "<u>Bar Chart</u>[48]" or as a "<u>Tree Map</u>[49]".
- The "<u>Details</u> 50" view will provide you **detailed information on all files** and folders contained in the current selected item in the <u>Directory</u> <u>Tree</u> 42
- The "<u>Extensions</u> [52]" 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 "<u>Users</u> [53]" view shows information on size grouped by users. You will see at a glance **which user uses how much space** in which folder.
- The "<u>Age of Files</u> 55" view shows the distribution of the **age of scanned files**, based on a certain date attribute.
- The "<u>Top 100 Files</u> 57" view lists the **100 largest files** in the scanned path along with several other details.
- The "<u>History</u>⁵⁸]" view shows changes in for the scanned path in a line chart.

7 The <u>Quick Access Toolbar</u> (32) 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 28 Allows you to select folders for scanning, to load, save, compare, export, and print collected data.
- <u>Home</u> Contains the most commonly used actions and elements of TreeSize.
- <u>Scan</u> (35) Contains all actions and elements related to the current scan.
- <u>View</u> 38 Contains all actions and elements influencing the general appearance of the application.
- Tools 37 Contains useful TreeSize and Windows-specific functions
- <u>Help</u> [39] 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 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 List of recently scanned paths and drives. Clicking a path will start Scanned a scan of this path.

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

Save scan Save the current scan to an XML file. This file can be loaded in to XML TreeSize again or can be used to perform a comparison at a later time. TreeSize ships with an XSLT file that formats the data inside the XML file for output in a browser that supports XSLT processing (e.g. Firefox >V1.0 or Internet Explorer >V5.5). 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 <u>Snapshot</u> [62] (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 42 (left pane) via email.
Export	Export the Directory Tree, chart or list content to a file. See chapter Export submenu 30.
Print report	Print the Directory Tree, chart or list content. See chapter Print submenu 31.
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 <u>options dialog</u> $\begin{bmatrix} 65 \\ 1 \end{bmatrix}$ of TreeSize. You can also choose whether only those folders currently visible (expanded) in the <u>Directory Tree</u> $\begin{bmatrix} 42 \\ 1 \end{bmatrix}$ or all folders will be exported. Please use the <u>Expand</u> $\begin{bmatrix} 36 \\ 16 \end{bmatrix}$ button on the <u>Home</u> $\begin{bmatrix} 33 \\ 13 \end{bmatrix}$ or <u>Scan</u> $\begin{bmatrix} 35 \\ 15 \end{bmatrix}$ 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 $Options \rightarrow Text$
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 .XLS file format (Excel 97-2003) as well as the .XLSX (introduced with Excel 2007). 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 [45] that should be included, go to <u>Options -></u> <u>Excel</u> [83].

- 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 [45] 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. The HTML file will be UTF8-encoded and thus includes Unicode characters. To configure the behavior for HTML exports and the charts 45 that should be included, go to Options -> PDF 81.
- 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 subfolders) to the clipboard. You can paste this list to your favorite spreadsheet or word processor. The settings for the <u>text export</u> 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 many available charts (<u>Charts</u> 45) view, <u>History</u> 58) 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 <u>chart</u> 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.				

Using TreeSize

- 32
- Print right pane Print the <u>chart</u> 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 <u>charts</u> 45, 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".

] ا 🔕	📕 🗌 Auto	omatic upd	ates 🖵	2			Details T
File	Home	Scan	Tools	V V	/iew	Help	Detail
Select dia for sc	rectory	Stop Refresh • Remove sc	an	ize	Allocated space	Numbe of files	% Pero € Opt
🗢 🔿	🁔 ៉ L	ocal Disk (C:)			~ 🖸	🛓 Siz
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>	28,673 9,070 3,802,9 3,738,2	.5 MB Wi .0 MB Pro MB Syst MB Prog	ndows ogram Fil em Volun gramData	l es (x ne Inf	86) formation		Name Name

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.

👃 🔚 🗌 Automatic updates	-	Chart Tools Tree	Size Professional				
File Home Scan To	ols View Help	Chart					
Select directory for scan Stop	Size Allocated Space Of File	% Percent	Auto KB	Expand	Send by Export email	Open TreeSize Options File Search *	
Scan	Mode		Unit	Directory Tree	Scan Result	Tools	

Select Opens a dialog enabling you to select a folder for scanning. directory for scan 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 <u>Directory Tree</u> 42.
- 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 Removes the currently selected scan from the TreeSize window. scan

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).

Using TreeSize

- Expand Using the "Expand" button, you can expand or collapse the <u>Directory Tree</u> [42] 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 [43].
- Send by email Sends the <u>Directory Tree</u> ⁴² 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). <u>Email settings</u> 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 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 99.

Start as Restart TreeSize with administrator privileges.

administr ator 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					
shoot If you don't want the size information to shange					
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

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 42.

disabled for individual scans.

- Remove scan Removes the currently selected scan from the TreeSize window.
- Expand Using the "Expand" button, you can expand or collapse the <u>Directory Tree</u> [42] 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 42.

- Compare with saved 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 <u>Snapshot</u> ⁶² 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 scanCreates a scheduled Windows task for the currently
active scan.
This is supported in the Professional edition only.Compress itemCompresses 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.

۵ ا 🖢	Automatic upd	lates 🔻		Chart Tools	TreeSize	Professional				
File	Home Scan	Tools	View Help	Chart						
\$	2			>	3	5	<u>i</u>	₿.	×	
Options •	Open TreeSize File Search 🔹 sch	Manage neduled scan	Create Cr s = snapshot i	eate portable installation	Empty recycle bin	Remove obsolete software	Configure Windows System Restore	Defragment 1 Disks	Map network drive	
Options		Tree	Size			Disk Space Mana	agement	System	Tools	

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 <u>Using TreeSize File Search</u> [99].
Manage scheduled scans	Shows all scheduled tasks of TreeSize. Tasks can be customized here.
Create snapshot Create portable installation	Creates a new Snapshot 62 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. 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 System Restore	Define how much space the Windows System Restore feature can use on your local hard drive.

Defragment Open the Windows Disk Defragmenter. disks

Map	Opens the Windows "Map Network Drive" dialog.
network	
drive	

6.1.6 View Tab

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

🔕 🔜 🔲 Automatic updates 🔻	Chart Tools	TreeSize Professional	
File Home Scan Tools View Help	Chart		
Size Allocated Number space of files % Percent % Percent % Optical media Auto B	GB .0 KB .00 Decimals	Image: Sort by size Image: Sort by size Image: A box by name Image: Sort by name	 ✓ Drive List ✓ Scan overview ✓ Status bar
Mode	Unit	Sort Directory Tree	Show or hide

|--|

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.
ТВ	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).
В	Show size values in byte (B).
Decimals	Sets the number of decimals shown in displayed values.

- Sort by Sort items by size (descending order). size
- Sort by Sort items in alphabetical order.
- name
- No sorting Do not sort items. This can be useful when scanning large folders drives because folders don't permanently change their position.

Group Groups all scans in the <u>Directory Tree</u> 42 to receive the total results scans for all scans. See also "<u>Group scans in the Directory Tree</u> 44]".

Show Shows size changes instead of current values in the <u>Directory</u> size <u>Tree</u> 42. This view option can only be toggled if the current scan was compared with an XML report or snapshot. See also "<u>Size</u> <u>comparison</u> 63".

Drive list	Show or	hide	Drive	List	60
21110 1101	011011 01				1

Scan Show or hide scan overview toolbar (provides information such as overview 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 Show or hide status bar (provides information on active scan filters and or errors that occurred during scan process).

6.1.7 Help Tab

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

0	🚽 🗌 Autoi	matic upda	ites 🖵			Ch	art Tools	TreeSize	Professional	
File	Home	Scan	Tools	View	Help		Chart			
2			a local					R	V	
help	manual	Question	ns	About C	update	new?	insta	.nange Ilation key	maintenance	
	Help				Version			Licer	nse	

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 Changes the installation key of the software. installation key

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

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



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

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

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 <u>directory tree</u> ⁴² or use the button "Select directory for scan" on the ribbon tab "<u>Home</u> ³³]". You can also double-click on the drive in the TreeSize <u>drive list</u> ⁶⁰ 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 "*\ \severname\share*", which can be entered in the drop-down box on top of the directory tree 42. You can also select the remote path using the button "Select directory for scan" on the ribbon tab "<u>Home 33</u>" and browse to the path in the "Network" folder. UNC paths can also be added to the <u>drive list 60</u> using the right-click menu.

Mobile Devices and Smartphones

Mobile devices and smartphones can be scanned with TreeSize if they support the <u>MTP protocol</u>. 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 "<u>Home</u>[33]". TreeSize also support entering paths to mobile devices like this: "*This PC\Galaxy Tab A*" in the dropdown box on top of the <u>directory tree[42].</u>

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 "<u>Home</u>[33]" 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 "<u>Home</u> [33]" 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/*".

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

- <u>Notes</u> 43
- Expand or collapse the Directory Tree 43
- Group scans in the Directory Tree 44

🔕 🔚 🗌 Automatic updates 🗦								
File	Home	Sc	an	Tools	V	/iew	Help	
Select d for s	irectory can	Stop Refre Remo	sh • we scan	Siz]] ze	Allocated space	Num of fi	
<p th="" ⇒<=""><th>1</th><th>21</th><th></th><th></th><th></th><th></th><th>~ (</th></p>	1	21					~ (
× 🛀	54,194.1 N	IB C	:\ - XMI	. impor	t			
>	28,673	.5 MB	3 Wind	ows				
>	9,070	.0 MB	8 Prog	ram File	s (x	86)		
>	3,802.9	9 MB	System	Volum	e Inf	ormation		
>	3,738.2	2 MB	Progra	mData				
>	2,564.3	3 MB	Users					
>	2,248.2	2 MB	Progra	m Files				
	2,028.1	1 MB	[2 Files]				
>	1,327.1	1 MB	\$Recyc	le.Bin				
>	741.9	9 MB	MSOCa	ache				

Notes

- If you place your mouse cursor on a folder, you'll be shown a tool tip with detailed information if the <u>corresponding option</u> [76] 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 <u>Find</u> 36 dialog (<u>Scan</u> 35 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 (<u>Options > View > General</u>^[71]).
- The color for the gradient bar can be configured in the options dialog (Options > View > Directory Tree 74).

Expand or collapse the Directory Tree

Using the **Expand submenu** (accessible via tabs <u>Home</u> ³³ and <u>Scan</u> ⁶⁷) 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**.

👃 🔚 🗌 Automatic u	odates 🔻 🛛 🛛 Detail	Tools TreeSize Professional
File Home Scan	Tools View Help Det	ails
🤣 🗙 🎰	E E 🛅 1	
Refresh Stop Remove scan	Expand Find Compare with Compare saved scan - snap	are with Compare Show size Schedu shot ▼ with path changes this sca
Operations	To level <u>1</u>	are
🗢 🔿 👔 🛛 C:\	To level 2	53,728.7 MB Allocated: 54,194.1
∽ 🛀 54,194.1 MB C:\-	To level <u>3</u>	🖽 Details 📇 Extensions 🚇
> 28,673.5 MB	To level <u>4</u>	Size Street Stre
> 9,070.0 MB	To level <u>5</u>	ws 28.467.5 M
>3,802.9 MB Sy	To level <u>6</u>	am Files (x86) 8,944.9 M
> 3,738.2 MB Pr	<u>F</u> ull expand	n Volume Inform 3,802.8 M
> 2,564.3 MB U	Reset expand state of scan	imData 3,753.1 M
> 2,248.2 MB Pr	Expand folders larger than: 500 M	в 2,509.3 М
1 27 1 MP \$	Hide fd ders smaller than: 500 MB	im Files 2,216.0 M
741 9 MB M	Set size Hide folders smaller than:	1,408.0 M
	Hide those folders from t	1,265.2 M
	which are smaller than a	certain 741.7 M
	size. The size value can be	e specified 256.0 M
	menu item below.	0.4 M
		0.0 M
l		

Group scans in the Directory Tree

With the "<u>Group scans</u>[33]" button (available on the <u>View</u>[38] 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:

• <u>Chart</u> 45 Visualizes folder information in several different types of charts.

- <u>Details</u> Provides an Explorer-like list of files and folders contained in the currently selected item in the <u>Directory Tree</u> 42.
- Extensions Shows information on size grouped by file types. 52
- <u>Users</u> 53 Shows information on size grouped by users.
- <u>Age of</u> Shows the distribution of the age of scanned files, based on a <u>Files</u> **55** certain date attribute.
- <u>Top 100</u> <u>Files 57</u> Lists the 100 biggest files in the scanned branch in detailed view.
- <u>History</u> 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 <u>view mode</u> (38) of TreeSize. There are three basic types of charts, namely:

- Pie Chart 47
- Bar Chart 48
- Tree Map 49

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.

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

🔕 🔚 🔲 Automatic updates 🗢	Chart Tools	TreeSize Professional			-
File Home Scan Tools View	Help Chart				
Pie Chart Chart Map	d tripane	 Show chart in 3D Color gradient as background 	 Show Legend Show free space Show long tooltips 	€ Zoom in € Zoom out E Zoom 100%	
Chart Type Export		Style	Show or hide	Zoom	

For all directory charts the following commands are commonly available:

- Pie ChartSwitches to pie chart view.
- Bar Chart Switches to bar chart view.
- Tree Map Switches to hierarchical chart view.

Using TreeSize

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.
Level of detail	Change the detail level of the tree map.
Show chart in 3D	View chart in 3D or 2D.
Color gradient as background	Toggles the gradient in the background of the chart.
Show long tooltips	Hovering segments of a chart can show detailed information. Use this option to switch between simple and detailed tooltips.
Zoom in	Zooms in on the chart.
Zoom out	Zooms out of the chart.
Zoom 100%	Resets zoom to 100%.
Dependent on the c	lisplayed chart type, there are additional options available:
For pie charts:	
Show Free Space	Show the free space of a drive as additional slice.

Show legend Displays a legend in this chart.

For bar charts:

- Show labels Show or hide short information for all segments of the chart.
- Show Grid Show or hide grid lines for this chart.

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 <u>Directory Tree</u> 42.

The diagram contains the name of each folder, its size (or allocated space, or number of files; for more information please see <u>view modes</u> (38), 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 18 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 <u>file extensions</u> [52] 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 purple (top level directories) to bright yellow (directories with a deep file system level). These colors can be adjusted using the <u>color picker</u> [46] in the context tab. The shown rectangles must have a minimum size to be displayed. You can customize this minimum value using the <u>Level of Detail</u> [46] 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 <u>Directory</u> <u>Tree</u> 42. 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 <u>Directory Tree</u> 42. 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 <u>Details</u> <u>page</u> 73 in the options dialog of TreeSize.

0	Chart	E Details		Extensions	🚨 Us	ers 🛅 Age o	of Files h	Top 100 Files	Misto 🖌	y .	
Na	me				Size	Allocated \sim	File	s Folde	ers % of F	arent (All	Last Modifie
	Windo	WS		27.	8 GB	28.0 GB	110,368	49,72	26	<mark>2.</mark> 9 %	11/4/2013
	Progra	m Files (x86))	8.	7 GB	8.9 GB	57,546	11,59	90	6.7 %	11/4/2013
	System	n Volume Info	rm	3	.7 GB	3.7 GB	29		8	7.0 %	11/4/2013
	Progra	mData		3	.7 GB	3.7 GB	23,433	4,3	60	6.9 %	11/4/2013
	Users			2	.5 GB	2.5 GB	22,565	13,0	22	4.7 %	11/4/2013
	Progra	m Files		2	.2 GB	2.2 GB	19,646	5,3	14	4.1 %	10/29/2013
4	pagefil	e.sys		1	.4 GB	1.4 GB	1		0	2.6 %	4/27/2016
	\$Recyc	:le.Bin		1	.2 GB	1.3 GB	24,642	2,24	40	2.4 %	11/4/2013
	MSOC	ache		741.	7 MB	741.9 MB	119)	54	1.4 %	10/29/2013
4	swapfi	le.sys		256.	0 MB	256.0 MB	1		0	0.5 %	4/27/2016
	bootm	gr		386	5.0 KB	388.0 KB	1		0	0.0 %	7/10/2015
P	POOT	лут		1	Puter	1000	1		0	009/	7/10/2015

Context tab: Details

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

Using TreeSize

👃 l 📘 🔲 Auto	matic updates 🔻	Details Tools	TreeSize Professional
File Home	Scan Tools View	Help Details	
Delete Properties	Export	Select all Select none	Compress Open command Open containing prompt folder
File Operations	Export	Select	Tools

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

- Delete Delete 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** Show the properties for the selected item.
- Save Export 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)".
- Clipboard Export the contents of the "Details" view to the clipboard. If two or more items are selected, only the selected items will be exported.
- Email Send the content of the "Details" view via email.
- Print Print the selected items of the "Details" list.

Select all	Select all items in the list.
Select none	Unselect the list items.

- Invert Invert the selection.
- selection

Open command prompt	Open command prompt at the current directory of the "Details" view.
Compress	Compress this file or folder using NTFS compression.
Decompress	Turn off NTFS compression for this file or folder.
Copy path	Copy the path of the selected items to the clipboard.

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).

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 of dialog.

۲	Chart 🔠 Details	Extensions	😤 Users 1 Age	of Files 🔝 Top	100 Files 🛛 🎽	History
Ext	tension	Size	Allocated	Percent ${\scriptstyle \lor}$	Files	Description
>	Program Files	17.6 GB	17.7 GB	33.5 %	68,362	Program Files, Libraries a 🔨
>	Miscellaneous Fi	10.5 GB	10.5 GB	19.9 %	32,231	Unknown file types
>	System Files	8.2 GB	8.2 GB	15.5 %	21,131	System Files
>	Software Devel	7.0 GB	7.1 GB	13.5 %	76,669	Source and project files
>	Container Files	2.3 GB	2.3 GB	4.3 %	1,164	Compressed Archives an
>	Graphic Files	1.5 GB	1.5 GB	2.9 %	34,764	Files containing pictures,
>	Help Files	1.4 GB	1.4 GB	2.6 %	2,121	Files of the Windows hel
>	Data Files	1.4 GB	1.4 GB	2.6 %	7,470	Files containing data of v
~	Text Files	1.0 GB	1.0 GB	1.9 %	3,495	Plain text files, log files
	.txt	832.9 MB	840.4 MB	1.6 %	3,268	Text Document
	log 📄 📕	186.9 MB	187.4 MB	0.3 %	227	Text Document
>	Mail Files	413.8 MB	413.8 MB	0.8 %	25	Email messages and files
>	Office Files and	399.7 MB	402.3 MB	0.7 %	1,214	Documents and files of c
>	Database Files	242.1 MB	244.5 MB	0.5 %	981	Files containing the data
>	Video Files	208.9 MB	209.3 MB	0.4 %	232	Files containing videos o
>	Temporary and	201.2 MB	200.2 MB	0.4 %	155	Temporary files and bac.
>	Configuration Fi	146.4 MB	153.0 MB	0.3 %	2,318	Files containing configur 🗸
<						>
	Program F	iles	Miscellaneous Files	System File	Software Develo	pment Files
	33.3%		13.3%	15.5%	13.34	

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.

👃 📙 🗌 Automatic updates 🤫	,	Extensions Tools	TreeSize Professional
File Home Scan Too	ls View Help	Extensions	
Show files of Limit to this clear filter	Export	rd Select	all Show chart none Group file types selection
Filter and Search	Export	Sel	ect Current view

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



- Clear filter Remove the filter from the tree and show size information for all file types.
- Save 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)".
- Clipboard Copy the content of this list to the clipboard. If multiple ltems are selected, only the selected items will be copied.
- Email Send the content of the "Extensions" view via email.
- Print list 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 horizontal bar 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 [76]").
- 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 $\boxed{67}$).

🐸 Chart	E Details		Extensions	🔏 Users	🔨 Age of Files	🔝 Top 10	0 Files 🔛 Hi	story
Name				Size	Allocated	Percent \vee	Files	Full User Name
SYSTE	M			19.1 GB	19.3 GB	36.5 %	101,571	SYSTEM 🔨
Admir	istratoren			14.8 GB	14.9 GB	28.2 %	76,656	Administratoren
Truste	dinstaller			11.9 GB	12.1 GB	22.8 %	69,663	TrustedInstaller
🔲 Zugriff	f verweigert			3.7 GB	3.7 GB	7.0 %	10	Zugriff verweigert
📃 Der Pr	ozess kann ni	cht		2.0 GB	2.0 GB	3.7 %	1	Der Prozess kann nicht.
📃 Admir	nistrator		57	75.1 MB	591.8 MB	1.1 %	6,590	Administrator
S-1-5-	2141351755	-10	21	12.8 MB	220.0 MB	0.4 %	2,977	S-1-5-2141351755-10.
LOKAL	ER DIENST		10	03.9 MB	104.1 MB	0.2 %	221	LOKALER DIENST
NETZV	VERKDIENST		4	14.6 MB	44.7 MB	0.1 %	24	NETZWERKDIENST
S-1-5-	2141351755	-10	3	32.6 MB	34.0 MB	0.1 %	560	S-1-5-2141351755-10.
Updat	usUser			1.7 MB	1.9 MB	0.0 %	64	UpdatusUser
S-1-5-	2141351755	-10		8.3 KB	16.0 KB	0.0 %	2	S-1-5-2141351755-10.
S-1-5-	2141351755	-10	80)5 Bytes	12.0 KB	0.0 %	3	S-1-5-2141351755-10.
S-1-5-	2141351755	-10	25	i8 Bytes	8.0 KB	0.0 %	2	S-1-5-2141351755-10.
S-1-5-	2141351755	-10	25	i8 Bytes	8.0 KB	0.0 %	2	S-1-5-2141351755-10.
S-1-5-	2141351755	-10	12	9 Bytes	4.0 KB	0.0 %	1	S-1-5-2141351755-10.
S-1-5-	2141351755	-10	12	9 Bytes	4.0 KB	0.0 %	1	S-1-5-2141351755-10. 🗸
<					-			>
	SYST 36.5	EM %			Administratoren 28.2%		TrustedInsta 22.8%	ller

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.

🔕 📊 🔲 Automatic updates 📼						Users Tools	TreeSize	Professional	
File	Home	Scan	Tools	View	Help	Users			
Show file of this use	s Limit to er this user	Clear filter	Export	🖃 Email 📑 To clipl 🚑 Print ri	board ght pane	Select Select	all none selection	Show chart	
Filt	er and Sear	ch		Export		Sele	ect	Show or hide	

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.
Save	Save the contents of this list to a file. If multiple items are selected, only the selected items will be saved.
Clipboard	Copy the content of this list to the clipboard. If multiple Items are selected, only the selected items will be copied.
Email	Send the content of the "Users" view via email.

Using TreeSize

Print list	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 horizontal bar 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 <u>customize the intervals</u> ⁷⁸. The boundaries of the intervals are always rounded to full days, i.e. to 00:00 a.m.

🔕 🔛 🔲 Automatic updates 🗧						Age of Files Tools	Tr	eeSize Professional		
File	Home	Scan	Tools	View	Help	Age of Files				
Save	I I Email III Clipboard ▼ Save A Print right pane		Customize file age intervals		 Show chart in 3D Color gradient as background Colorize bars 		nd	Show grid	Zoom in Zoom out Zoom 100%	
	Export		Option	ns		Style		Show or hide	Zoom	

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

Save the current chart as graphic file.
Export the current chart and send it via email. You can configure your email settings in options dialog.
Copy the current chart to the clipboard, to paste it in other applications.
Print the current chart.

Customize file age Customize file age intervals (requires a scan refresh). intervals

Show chart in 3D	View chart in 3D or 2D.
Color gradient as background	Toggle the gradient in the background of the chart.

Show grid Show or hide grid lines for this chart.

6.4.6 Top 100 Files

The **Top 100 Files** view lists the 100 largest files in the scanned branch. Similar to the <u>Details</u> so 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.

۲	Chart	E Details	<u> </u>	Extensions	🍇 Users	1 Age of	Files	🏦 Тор	100 Files		History		
Na	ime			Containing	Path			Size 🗸	Last Mo	di	Last Ac	ce	Туре
	offices	uiteww-x-nor	1	C:\Window	s\SoftwareD	istribution		334.1 MB	7/21/20	13	7/21/20	013	.cab (Cabini 🔨
2	ProPrV	VW2.cab		C:\MSOCad	he\All User:	s\{9115000		324.7 MB	8/15/20	13	7/10/20	013	.cab (Cabini
	DataSt	ore.edb		C:\Window	s\SoftwareD	istribution		296.1 MB	11/4/20	13	7/12/20	012	.edb (EDB Fi
թ	d1081.	msp		C:\Window	s\Installer\			272.5 MB	4/23/20	11	7/18/20	011	.msp (Wind
ß	f51a63	.msp		C:\Window	s\Installer\			260.2 MB	12/8/20	11	7/13/20	012	.msp (Wind
թ	e92275	i.msp		C:\Window	s\Installer\			189.7 MB	2/22/20	11	7/18/20	011	.msp (Wind
ß	20bba	1.msp		C:\Window	s\Installer\			185.3 MB	4/7/201	1	7/12/20	012	.msp (Wind
13	e9280c	msp		C:\Window	s\Installer\			183.3 MB	2/11/20	11	7/18/20	011	.msp (Wind
	MSIE65	5C.tmp		C:\Window	s\Installer\			178.3 MB	8/19/20	13	8/19/20	013	.tmp (TMP I
	netfx_c	ore.mzz		C:\Window	s\Microsoft	.NET\Fram		173.1 MB	3/18/20	10	5/14/20	010	.mzz (MZZ F
13	e91e20).msp		C:\Window	s\Installer\			164.6 MB	2/22/20	11	7/18/20	011	.msp (Wind
<u></u>	DATA1	.CAB		C:\Program	Files (x86)	InstallShiel		150.5 MB	8/30/20	13	9/30/20	013	.CAB (Cabin
	Data1.	cab		C:\Users\Ad	dministrator	\AppData\		150.0 MB	6/7/201	3	9/30/20	013	.cab (Cabini
	SOFTV	VARE		C:\Window	s\System32	\config\		134.0 MB	11/4/20	13	10/31/2	2013	(File)
	SOFTV	VARE		C:\Window	s\System32	\config\Re		132.8 MB	10/31/2	013	10/31/2	2013	(File)
\$	Micros	oft.SqlServer.		C:\Window	s\assembly\	Nativelma		123.7 MB	9/18/20	13	9/18/20	013	.dll (Applica
	ProPrV	VW.cab		C:\MSOCad	he\All User	s\{9115000		121.8 MB	8/15/20	13	7/10/20	013	.cab (Cabini
	vcl.hxs			C:\Program	Data\{66380	DDE6-2A3D		116.5 MB	10/19/2	011	7/13/20	012	.hxs (HXS Fi
	vcl.hxs			C:\Program	Files (x86)	Embarcad		116.5 MB	10/19/2	011	7/13/20	012	.hxs (HXS Fi
	Windo	ws.edb		C:\Program	Data\Micro	soft\Searc		104.1 MB	11/4/20	13	7/12/20	012	.edb (EDB Fi
(FireMo	onkey-iOS.dm	q	C:\Program	Data\{E8B8	1390-8FA1		101.7 MB	10/27/2	011	7/13/20	012	.dmq (DMG ∀

Context tab: Top 100

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

🔕 📊 🗌 Automatic updates 🗧						Top 100 Tools	TreeSize Profes	sional	
File	Home	Scan	Tools	View	Help	Top 100			
Delete Pr	roperties	Export	🖃 Email 🗎 To clipt 🌦 Print ri	ooard ght pane	Sele	ect all ect none ert selection	Open containing folder	N Copy path	
File Ope	rations		Export		9	Select	Tools		

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

Using TreeSize

Delete	Delete all selected files.
Properties	Show the properties for the currently selected file.
Save	Save the contents of this list to a file. If multiple items are selected, only the selected items will be saved.
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.
Email	Send the content of the "Top 100" view via email.
Print list	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 containing folder	Open Windows Explorer to show the folder containing the selected file.
Copy 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 <u>exclude filters</u> [69] 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 <u>SpaceObServer</u>, 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.

۱	📘 🗌 Automatic upd	ates 🔻		History Tools	TreeSize Professiona	al	
File	Home Scan	Tools Viev	v Help	History			
Save	🖃 Email 📄 Clipboard 🚔 Print right pane	Manage history data •	Show ze	ropoint 🗹 Si id 🗌 Si bels 🗌 Si	how "Size" series how average series how total diskspace	 Equalize Chart Color gradient as background Show data points 	 Zoom in Zoom out Zoom 100%
	Export	Data		Show or h	ide	Style	Zoom

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 chart	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.

Using TreeSize

Show "Size" seires	Do not only show the allocated space in this chart but also the size.
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 total diskspace	Show or hide a horizontal line showing the total diskspace.
Show labels	Show info boxes (size values/number of files) in the chart.
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.

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 **hardware status** of supported devices.

Double-clicking starts a scan of the selected drive.

Name	Size	Free	% Free	Network Locat	S.M.A.R.T.
🏪 C:\	39.4 GB	18.1 GB	46 %		Not suppo
🛖 T:\	1.98 TB	1.18 TB	<u>60 %</u>	\\intranet\temp	

Notes

- If you don't see your network drives in the Drive List, please refer to <u>this FAQ</u> <u>entry</u>
- 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"
- 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 <u>command line option</u> [145] "/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 Imports all paths currently contained in the clipboard into clipboard 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 37) > 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 37" 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 scan with a previous scan using the comparison feature [63]. 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.
- 2. Go to <u>Scan</u>[35] > <u>Compare with saved scan</u>[36] or <u>Compare with</u> <u>snapshot</u>[36].
 - 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 <u>Views</u> 44, or both.

By comparing a scan result with a previous scan, you can easily see which filers 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 <u>snapshot feature</u> 62. 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 <u>Directory Tree</u> 4^{2} . Now click the "Compare with snapshot" button on the "<u>Scan</u> 3^{5} " Ribbon tab. You can also use the <u>Application Menu</u> 2^{8} ("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.

TreeSize P	rofessional			×
	Compare wi Please selec and click on	th snapshot t a snapshot fro "Compare".	m the list of available	e snapshots
Currently	selected root fo	older		
C :\				
Date	F	Free	% Free	

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 <u>Directory Tree</u> [42] and click the "Compare with saved scan" button on the "<u>Scan</u> ³⁵]" Ribbon tab. You can also use the <u>Application Menu</u> ²⁸] ("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 "<u>Directory Tree</u> 42]", in the "<u>Details</u> 50]" view, or in both at the same time.

🔕 l 👔 🗞 👳 l	Details Tools		TreeSize Profes	sional		- 🗆 🗙
File Home Scan Tools View	Help Details					^
Select directory for scan Scan	Number Optical media of files Mode Unit	BB Expand Send by email Directory Tree Scan	Export File Seat	eSize Options		
🗇 🔿 🖹 🚢 Local Disk (C:)	v O 🚨 Size: 46.206.	3 M8 Files: 159,035 Gr	rowth (Allocated):	10,005.2 MB % Gro	wth (Alloc	ated): -27.5%
+10.005.2 MB C/	Chart III Details RC	Extensions 🤗 Users 🕱 4	Ane of Files	100 Files		
10,041.2 MB FAD	Name	Size Files Gr	owth (Allocated)	Growth (Allocated)	Folders	% of Parent
1 PILO MB Windows		16,838.6 MB 85,724	+421.0 MB	+2.5 %	20,780	36.7 %
 + 125.0 Into ProgramData 	Users	10 000 7 440 19,090	+45.8 MB	+0.4 %	4,368	23.1 %
+45.8 MB User			= 10,041.2 MB	n/a	1,000	21.7 %
A 22.0 MB SRecy A A A A A A A A A A A A A A A A A	,005.2 MB_C:\		0.0 MB	0.0 %	576	6.1 %
🕨 🎍 🔪 =9.8 MB Progr	+10,041.2 MB Files		+9.8 MB	+0.6 %	5,444	3.5 %
-128.0 MB [2 File	+421.0 MR Windows		-531.6 MB	-36.8 %	8	2.0 %
S31.6 MB System	+421.0 MD WINDOWS		+22.0 MB	+4.2 %	240	1.2 %
	+125.0 MB ProgramData		+125.0 MB	+40.6 %	212	0.9 %
	+45.8 MB Users		0.0 MB	0.0 %	0	0.0 %
	22.0140 00 01 0		0.0 MB	0.0 %	0	0.0 %
	+22.0 MB SRecycle.Bin		0.0 MB	0.0 %	0	0.0 %
	+9.8 MB Program File	5	0.0 MB	0.0 %	0	0.0 %
	-128.0 MB [2 Files]					
Name Siz	rectoring (ernes)					
🚣 C:\ 126 GB 🔪 🖻 嶋	-531.6 MB System Volur	ne Information				
Free Space: 84.5 GB (of 126 GB) 159,035 F	iles 0 Excluded 0	\Windows\				

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 33" 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 General settings influencing the scan behaviour of TreeSize.

Filter 69 Define filtering options for TreeSize.

View

Using TreeSize

General General settings influencing the appearance of TreeSize. $\begin{bmatrix} 71 \\ 71 \end{bmatrix}$

Details 73 Configure the columns shown in the Details 50 view of TreeSize.

Directory Customize the appearance of the <u>Directory Tree</u> 42 of Tree 74 TreeSize.

FileDefine which file extensions will be grouped together in theGroupsExtensions view52of TreeSize.

Age of Configure the intervals used to generate the charts of the Age of Files 55 view.

Export

- **Printer** 79 Configure printer settings for TreeSize.
- **PDF** 81 Configure the PDF file report of TreeSize.
- **Excel** [83] Configure the Microsoft Excel file report of TreeSize.
- **HTML B5** 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** 91 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.

TreeSize Professional -	Options	×
	TreeSize Professional - Scan Options The menu group "Scan" allows you to define options that influence the scan behavior of TreeSize.	
Scan General Filter View General EDetails File Groups Age of Files Export PDF Excel File Groups CSV CSV CSV CSV CSV CSV Email System Context Menu	Scan Depth Track NTFS alternate data streams and NTFS hardlinks (increases scan duration) Follow mount points and external symbolic links to directories Statistics Statistics for age of files (increases memory consumption) Create statistics on file extensions (increases memory consumption) Create statistics on file owners (increases scan duration) Notifications Show error messages during scan Thread Options Thread options User Defined Cluster Size Original	
Help (F1) Expert	mode OK Cancel A	pply

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 <u>hardlink</u> to another file, if contains <u>alternate data streams (ADS)</u> 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 <u>Notes on NTFS</u> 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 <u>Age of Files</u> 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[52] 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 <u>Users view</u> 53 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.

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 <u>TreeSize File Search</u> ¹⁰⁰.

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.

User-defined Cluster Size (expert option)

Use this option to see what the values for allocated and <u>wasted space</u> would be with a different cluster size or file system. Changing this option will require a rescan. This options will not be saved when you exit TreeSize in order to avoid wrong results when using it the next time.

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.

S TreeSize Professional - O	ptions					
() "	reeSize P The menu <u>c</u> scan behavio	Profession group "Scan" a or of TreeSize.	al - Scan Opti Illows you to define	ONS options that influence	the	
Scan	Active	Action	Pattern	Match Acaios	+	Type
V Filter	Acuve	Action	Fattern	Match Agains		Type
View		Exclude 🗸 🗸	c:\temp	Full Path	\sim	Wildcard V
General General Certails File Groups Age of Files Export Printer PDF Excel CSV XML CSV XML Text Email System Start Context Menu	 Add p Additional Fil Include Exclude 	Dattern Iter Settings Iter Settings Iter Settings Iter Settings Iter Settings Iter Settings Iter Settings Iter Settings	have been created in f archive attribute set	Remove depast:	day:	> Preview
Help (F1) Expert m	ode			ОК	Cance	l Apply

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 <u>Directory Tree</u> [42] as well as any other <u>view</u> [44]. 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".

- 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".

👃 Pattern Previ	ew					-	- C	x c
Action	Patte	m		Matc	h Against		Тур	pe
Exclude 🗸 🗸	Exclude V C:\temp			Full Path		\sim N	/ildcard	\sim
Explorer View Lis	st of Paths							
> <mark>P</mark>	rogram Files (x86)	^	Name		^			Size
> P	rogramData		Gettin	gStarted.exe				1,003 KB
R	eports		JamEx	plorer.exe				1,065 KB
📙 te	emp							
> <mark> </mark> U	lsers							
> <mark>.</mark> V	Vindows							
> 👳 T:\		~						
<	>		<					>
ОК							0	Cancel

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).

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.

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.

- 6.8.2 View
- 6.8.2.1 General

General settings that influence the appearance of TreeSize.

👃 TreeSize Professional -	Options	×
	TreeSize Professional - View Options Under the menu group "View", you will find settings that affect the presentations in the main window of TreeSize.	
Scan Image: Scan and the second se	Visual Effects Show compressed elements in blue Show elements containing paths >260 chars in red Show elements in bold that are larger than: 15 % of the scanned folder Date/Time Format Use the following date/time format, e.g. for "Last Accessed": 4/27/2016 Usernames Format Format that is used for statistics and username related columns such as "Permissions" or "Inherited Permissions": Expert Options Number of paths in the "Recently scanned" list: More often Less often Ø Determine icons based on file extension only (faster)	× ×
Help (F1) Expert	mode OK Cancel	Apply

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 <u>Notes on NTFS</u> [157].

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 <u>MAX_PATH</u> constant. Many tools and the .NET framework have problems with these long paths. Using the <u>custom search</u> 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 <u>Directory Tree</u> 42 and in the <u>Details view</u> 50 of TreeSize.

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.

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 <u>Details</u> solview of TreeSize. For a description of the available columns please refer to "Available columns".

S TreeSize Professional -	Options	×
	TreeSize Professional - View Options Under the menu group "View", you will find settings that affect the presentations in the main window of TreeSize.	
Scan Image: General Image: Genera Image: Genera <th>Visible Columns Image: Full Path Image: Full Path Image: Full Path Image: Part Path Image: Part Path Image: Part Path Image: Part Path Image: Path Path Image: Path</th> <th>~</th>	Visible Columns Image: Full Path Image: Full Path Image: Full Path Image: Part Path Image: Part Path Image: Part Path Image: Part Path Image: Path	~
Help (F1) Expert	mode OK Cancel	Apply

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).

Using TreeSize

Open cont folde Too	aining r Is	SS					
cated: 54,194.1 MB Files: 258,350 Folders: 86,330 Last Modified: 11/4/2013							
Extensions	🚨 Users 📋 Age	of Files	🄝 Top 1	00 Files 🔛	History		
Size Allocated V Files Folders % of Paren Last Modified La						Last Accessed	
28,467 5	MR 28 673 5 MR	110	49,7	52.9 %	11/4/2013	11/4/2013	
8,9	Resize All Columns To	Fit	.5	16.7 %	11/4/2013	10/18/2013	
3, 🧹	Name		8	7.0 %	11/4/2013	11/4/2013	
3,	Full Path		360	6.9 %	11/4/2013	11/4/2013	
2.	Size)22	4.7 %	11/4/2013	11/4/2013	
2,	Allocated		314	4.1 %	10/29/2013	10/29/2013	
1,	Filer		0	2.6 %	4/27/2016	7/30/2015	
1,	Growth (Allocated)		240	2.4 %	11/4/2013	11/4/2013	
	% Growth (Allocated)		54	1.4 %	10/29/2013	10/28/2013	
	% Growin (Allocated)		0	0.5 %	4/2//2016	7/30/2015	
~	Folders			0.0 %	7/10/2015	7/10/2015	
	Wasted		U U	0.0 %	//10/2015	7/10/2015	
~	% of Parent (Allocate	a)					
×.	Last Modified						
~	Last Accessed						
	Compr.						
	Owner						
	Optical media size						
	Current Date						
	Attributes						
	Туре						
	Dir Level						
	Creation Date						
	Containing Path						
	Avg. File Size						
	Permissions						

6.8.2.3 Directory Tree

Use these options to customize the appearance of the Directory Tree $\ensuremath{\boxed{42}}$ of TreeSize.

TreeSize Professional -	S TreeSize Professional - Options X					
	TreeSize Professional - View Options Under the menu group "View", you will find settings that affect the presentations in the main window of TreeSize.					
Scan [®] General [™] Filter View [®] Concerd	Grouping of Scans Group all scans in a "virtual root" Files in directory tree					
General ETE Details Directory Tree ETE File Groups	Do not show single files in the directory tree List single files below the "[Files]" nodes in the Directory Tree					
Image of Files Export Image Printer Image PDF Image Excel Image HTML Image CSV Image Text Image Text Image Email	Gradient Bars Show gradient bars as size indicators in directory tree Gradient colors:					
System						
Help (F1) Expert	mode OK Cancel App	ly				

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

Show 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

6.8.2.4 File Groups

This page allows you to define which file extensions will be grouped together in the Extensions view [52] of TreeSize.

S TreeSize Professional -	Options
	TreeSize Professional - View Options Under the menu group "View", you will find settings that affect the presentations in the main window of TreeSize.
Scan @ General ▼ Filter	Group definitions
View General Details Directory Tree File Groups	Image: Second system Image: Second system Image: Second
Export Printer	Associated file types *.*dbg
國 Excel 量 HTML 國 CSV 國 XML 國 Text	*.ahk *.asm *.bdsgroup *.bdsproj *.bpg *.boi
I Email System II Start II Context Menu	*.bpk *.bpr *.c *.cbl
	*.cbproj *.cpp <
Help (F1) Expert	mode OK Cancel Apply

Adding a new group

- 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 52.
- 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 rightclicking 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 <u>Age of Files</u> 55 view.

S TreeSize Professional - 0	Options		×
_	reeSize Professional - View Under the menu group "View", you w presentations in the main window of T	/ Options ill find settings that affect the FreeSize.	
Scan	Basic Configuration Create statistics for age of files: Interval Definition I Day(s) V I Week(s) V I Month(s) I Vear(s) Vear(s	Last Modified Date	 +
Help (F1) Expert n	node	ОК	Cancel Apply

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".

- 6.8.3 Export
- 6.8.3.1 Printer

Configure printer settings for TreeSize.

TreeSize Professional - 0	Options					×
	reeSize Professional - E Using "Export" you can customize formats like Excel, CSV, XML, or p	xport Optic the formatting, rinted reports.	DNS , etc. of different (output		
Scan	Charts to include <u>C</u> onfigure the charts that are added Pie chart Bar chart Tree map	to the export. Users Extensions	5	Age of Files		^
Diffection fries Diffection fries Diffection fries Export Printer Diffection Excel Diffection Excel Diffection CSV	Depth of Directory Tree Export expanded elements only Export the full directory branch Exported Columns Use same columns as in details v	iew	Exported Elements	ingle files es in export		
i Text i Text i Email System i Start i Context Menu	 Name Full Path Real Size Allocated Space Files Growth % Growth Folders Wasted Space 				*	
Help (F1) Expert r	node		OK	Cancel	Apply	•

Charts to include

Configure the charts that are added to the export

Check all the different chart 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 will be printed.

Export the full directory branch

If this option is selected, the complete <u>Directory Tree</u> ⁴² 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.

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 50.

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 printed report.

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.

6.8.3.2 PDF

Configure the PDF file report of TreeSize.

TreeSize Professional - 0	Options					×
	reeSize Professional - E Using "Export" you can customize formats like Excel, CSV, XML, or p	xport Optic the formatting, rinted reports.	DNS , etc. of different (output		
Scan	Charts to include <u>C</u> onfigure the charts that are added Pie chart Bar chart Tree map	to the export. Users Extensions	5	Age of Files		^
Diffection fries Diffection fries Diffection Age of Files Export Printer Diffection Excel Diffection HTML GO CSV	Depth of Directory Tree Export expanded elements only Export the full directory branch Exported Columns Use same columns as in details v	iew	Exported Elements	ingle files es in export		
i Text i Text i Email System i Start i Context Menu	 Name Full Path Real Size Allocated Space Files Growth % Growth Folders Wasted Space 				*	
Help (F1) Expert r	node		OK	Cancel	Apply	•

Charts to include

Configure the charts that are added to the export

Check all the different chart 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 <u>Directory Tree</u> vill be exported.

Export the full directory branch

If this option is selected, the complete <u>Directory Tree</u>^[42] 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.

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 50.

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

Left/Right/Top/Bottom

These margins will be applied to all pages of the PDF export.

Page orientation:

Select whether the exported page should be in portrait, or landscape mode.

6.8.3.3 Excel

Configure the Microsoft Excel file report of TreeSize.

TreeSize Professional -	Options	×
	TreeSize Professional - Export Options Using "Export" you can customize the formatting, etc. of different output formats like Excel, CSV, XML, or printed reports.	
Scan	Charts to include Configure the charts that are added to the export. Pie chart Users Age of Files Bar chart Extensions	^
Directory Tree Directory Tree	Tree map History Depth of Directory Tree Export expanded elements only Export the full directory branch Dructure single files O Include single files in export	
Excel Excel Excel Gen HTML Gen CSV Gen XML Gen Text Fmail	Exported Columns Use same columns as in details view Use Same Full Path Real Size	^
System	Include header information Used Size Unit Include units in export Size Unit: Last used in user interface	
Help (F1) Expert	mode OK Cancel	Apply

Charts to include

Configure the charts that are added to the export

Check all the different chart 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 <u>Directory Tree</u> vill be exported.

Export the full directory branch

If this option is selected, the complete <u>Directory Tree</u> ⁴² 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.

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 50.

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.

Units

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 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

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.

Default Target File

Path of the default target file

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

6.8.3.4 HTML

Configure the HTML file report of TreeSize.

TreeSize Professional -	Options			×
	TreeSize Professional - Ex Using "Export" you can customize formats like Excel, CSV, XML, or pr	cport Opt the formattin inted reports	t ions ng, etc. of different output	
Scan General Filter View General Details File Groups Age of Files Export PDF Excel Excel CSV ML ML CSV ML Text	Charts to include Configure the charts that are added Configure the charts that are added Pie chart Bar chart Tree map Depth of Directory Tree Export expanded elements only Export the full directory branch Exported Columns Use same columns as in details vie Full Path Full Path	to the export. Users Extensio History	Age of Files	
System System Start Context Menu Help (F1)	Allocated Space Allocated Space Files Growth Mindude header information Style Sheet mode		OK Cancel	Apply

Charts to include

Configure the charts that are added to the HTML export

Check all the different chart 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 <u>Directory Tree</u> vill be exported.

Export the full directory branch

If this option is selected, the complete <u>Directory Tree</u>^[42] 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.

Use same columns as in details view

Activate this option if you want to use the same columns that are currently used in the <u>details view</u> [50].

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.

Style Sheet

Path of the optional style sheet

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

6.8.3.5 CSV

Configure the CSV file report of TreeSize.

TreeSize Professional -	Options	×
	TreeSize Professional - Export Options Using "Export" you can customize the formatting, etc. of different output formats like Excel, CSV, XML, or printed reports.	
Scan [®] General [®] Filter View [®] General	Depth of Directory Tree Exported Elements Export expanded elements only Export the full directory branch Include single files in exported elements 	rt
ET Details Directory Tree File Groups Age of Files Export Printer PDF Excel Krcel Krcel CSV	Exported Columns Use same columns as in details view Use same colu	~
w XML w Text ⊡ Email System System Start Context Menu	✓ Include header information Used Size Unit ✓ Include units in export Size Unit: List separator Separate list columns using: Default (System regional settings)	ice V
Help (F1) Expert	mode OK Cancel	Apply

Depth of Directory Tree

Export expanded folders only

Only the expanded/visible parts of the <u>Directory Tree</u>⁴² will be exported.

Export the full directory branch

If this option is selected, the complete <u>Directory Tree</u> ⁴² 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.

Use same columns as in details view

Activate this option if you want to use the same columns that are currently used in the <u>details view</u> [50].

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.

Units

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.

S TreeSize Professional	- Options	×
	TreeSize Professional - Export Options Using "Export" you can customize the formatting, etc. of different output formats like Excel, CSV, XML, or printed reports.	
Scan ∰ General ▼ Filter View S General	Depth of Directory Tree O Export expanded elements only Export the full directory branch	
Image: Constraint of the second se	Exported Columns Name	~
≣Ş Context Menu	Style Sheet Path to style sheet (optional):	
Help (F1) Experi	t mode OK Cancel	Apply

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 42 will be exported.

Export the full directory branch

If this option is selected, the complete <u>Directory Tree</u>^[42] 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.

Style Sheet

Path of the optional style sheet

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.

🔕 TreeSize Professional - (Dptions	×
۲ • • • • •	reeSize Professional - Export Op Using "Export" you can customize the formatt formats like Excel, CSV, XML, or printed repor	otions ting, etc. of different output ts.
Scan ∰ General ▼ Filter View Scaneral	Depth of Directory Tree © Export expanded elements only O Export the full directory branch	Exported Elements Do not export single files Indude single files in export
Details Directory Tree File Groups Age of Files Export Printer DF Excel HTML CSV XML Text	Exported Columns Use same columns as in details view Name Full Path Real Size Allocated Space Files Growth Sfolders Wasted Space Wasted Space	
Email System Start Context Menu	% of Parent Last Modified Date Indude header information Used Size Unit	v
Help (F1) Expert n	Include units in export	Size Unit: Last used in user interface V OK Cancel Apply

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 <u>Directory Tree</u>⁴² will be exported.

Export the full directory branch

If this option is selected, the complete <u>Directory Tree</u>^[42] 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.

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 50.

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.

Units

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.

6.8.3.8 Email

Configure email settings for TreeSize.

Contraction TreeSize Professional - Options					
	TreeSize Professional - Export Options Using "Export" you can customize the formatting, etc. of different output formats like Excel, CSV, XML, or printed reports.				
Scan	Email content	^			
Tilter	To: Someone@mycompany.com				
View	Subject: TreeSize Professional Report				
Seneral ≣☷ Details डिंग्र Directory Tree	Format: HTML ~				
≣≓ File Groups 18 Age of Files	Transport				
Export	Use MAPI dient				
🖶 Printer	O Use SMTP server (required for scheduled tasks)				
PDF	SMTP connection settings				
Excel	From: TreeSize@mycompany.com				
and CSV					
and XML					
📾 Text	Port: 25 Default: 25 (SSL: 465)				
Email	Use secure (SSL) connection				
System	This server requires authentication				
Start		_			
E Context Menu	Personal				
	Pass <u>w</u> ord:				
	Test Connection				
Help (F1) Expert	mode OK Cancel	Apply			

Email content

То

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 <u>scheduled scan or search tasks</u> and 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 to attach

Configure the charts that are added to the email export

Check all the different chart 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 <u>Directory Tree</u> vill be exported.

Export the full directory branch

If this option is selected, the complete <u>Directory Tree</u> ⁴² 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.

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 50.

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.

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.

- 6.8.4 System
- 6.8.4.1 Start

Modify startup settings for TreeSize.

C TreeSize Professional - Options X			
	FreeSize Professional - System Options The menu items in the group "System" will let you define the startup conditions of TreeSize or the integration in the Windows context menu.'		
Scan Image: Construction of the second se	Start as Administrator Always start this application as administrator Action at Application Start When starting the application without a path to scan, then Do nothing Scan the same paths as last time Always scan these paths:		
Help (F1) Expert r	mode OK Cancel App	ply	

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 <u>path selection drop-down list</u> or via the corresponding button on the <u>Home</u> 33 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.

C TreeSize Professional - Options X		
_	reeSize Professional - System Options The menu items in the group "System" will let you define the startup conditions of TreeSize or the integration in the Windows context menu.'	
Scan General Filter View General Details Directory Tree File Groups Age of Files Export Printer PDF Excel HTML GSV XML Text Email System Start Context Menu	Explorer Context Menu Show TreeSize in Windows Explorer context menu of current user Show TreeSize File Search in Windows Explorer context menu of current user	
Help (F1) Expert m	OK Cancel	Apply

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.

Note for Windows XP/Windows Server 2003 users

For Windows XP and Windows Server 2003, TreeSize can add an additional column to the Windows Explorer as described below. Please note: Since Microsoft has removed the possibility for adding custom columns to the Windows Explorer, the additional column is not supported for Windows Vista or higher.

Explorer Column

Use this option to enable or disable the "<u>TreeSize Column for Windows</u> <u>Explorer</u> [161]". The TreeSize column can only be configured here if you selected "*Install TreeSize column for Windows Explorer*" during the installation process of TreeSize. Otherwise this option is disabled.

Using the TreeSize File Search

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 37" ribbon tab.

2	Open TreeSize File Search Start the TreeSize File Search for the currently selected scan.
2	<u>Biggest files</u> Search for the largest files in the currently selected scan.
2	<u>O</u> ldest files Search for the oldest files in the currently selected scan.
2	<u>Temporary files</u> Search for temporary and obsolete files in the currently selected scan.
2	Internet files Search for browser cache files in the currently selected scan.
P	<u>Duplicate files</u> Search for duplicate files in the currently selected scan.
2	Files with long paths Search for all files in the currently selected scan with paths exceeding 255 characters.
2	<u>Custom search</u> Search the currently selected scan for files or folders matching certain search criteria.
	<u>All File Search types</u> Start the TreeSize File Search with all available types of file search.

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

- The File Search Window
- The Ribbon Bar 101
- The Search Options
- Biggest files 108
- Oldest files
- Temporary files 109
- Internet files
- Duplicate files

- Custom search
- Move checked files 121

7.1 The File Search Window

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

	🚲 💽 🔝 🖬 🗢 TreeSize Prot	essional - File Search	- 🗆 X
	File Home View Tool	Help	^
	🔒 🗙 👗 ^{Cut}	🕼 Check all 🚰 📑 🛐 🏤 🔮 Burn 🚝 ү	
	Start Stop	Check if Export Email Delete Move Options Exclude	
	Conveh Edit	Use Address Expect E	
	Search		-
	Drives and Paths to search:	<u> </u>	/
	Predefined Searches	Search for files not changed 🗸 since 🔽 10/22/2012 🗸 / 🛄 200 🚔 days 🗌 Return complete branches only	cscompmgd.xml
		Name Containing Path Size Last Modi Last Acce Type Owner	Containing Path: C:\W
	Biggest Files [177]	Microsoft.Workfl C:\Windows\symbols\dll\ 13.5 KB 2/18/2011 2/1/2016 .pdb (PDB File) SYSTEM	Size: 5.2 KB
	Oldest Files [3.401]	Microsoft.VisualB C:\Windows\Microsoft.NET\Fram 8.5 KB 1/10/2010 2/1/2016 xml (XML Doc SYSTEM	Allocated: 5.2 KB
		🗹 🗟 Microsoft.VisualB C:\Windows\Microsoft.NET\Fram 28.0 KB 1/10/2010 2/1/2016 .dll (Applicatio SYSTEM	Type: .xml (XML Docu
	Contemporary Files [9,289]	Microsoft_VsaVb C:\Windows\Microsoft.NET\Fram 3.2 KB 11/4/2009 2/1/2016 xml (XML Doc SYSTEM	Last Modified: 8/31/2009
	Internet Filer (261)	Microsoft.Vsa.dll C:\Windows\Microsoft.NET\Fram 32.0 KB 1/10/2010 2/1/2016 .dll (Applicatio SYSTEM	Last Accessed: 2/1/2016
	M Minternet Piles [301]	Microsoft_VsaVb C:\Windows\Microsoft.NET\Fram 7.0 KB 1/10/2010 2/1/2016 .dll (Applicatio SYSTEM	
	🗹 📄 Duplicate Files	System.Windows C:\Windows\Microsoft.NET\Fram 258.4 KB 12/8/2009 2/1/2016 xml (XML Doc SYSTEM	
		Accessibility.xmi C:\windows\Microsoft.NET\Fram 34.0 KB 8/31/2009 2/1/2010 3mi (XML Doc SYSTEM AcoNetMMCExt v C:\Windows\Microsoft.NET\Fram 55.0 KB 9/31/2009 2/1/2016 yml (XML Doc. SYSTEM SYSTEM	<
	Custom Search	stream stream contraction of the stream st	
		CustomMarshaler C:\Windows\Microsoft.NET\Fram 13.0 KB 8/31/2009 2/1/2016 xml (XML Doc SYSTEM	
	🗹 실 Custom Search	🗹 🔄 IEExecRemote.xml C:\Windows\Microsoft.NET\Fram 3.4 KB 8/31/2009 2/1/2016 xml (XML Doc SYSTEM	
		🗹 🖭 IEHost.xml C:\Windows\Microsoft.NET\Fram 26.0 KB 8/31/2009 2/1/2016 .xml (XML Doc SYSTEM	
		IIEHost.xml C:\Windows\Microsoft.NET\Fram 13.5 KB 8/31/2009 2/1/2016 xml (XML Doc SYSTEM	
		SymWrapper.xml C:\Windows\Microsoft.NET\Fram 61.4 KB 8/31/2009 2/1/2016 .xml (XML Doc SYSTEM	
		Microsoft,Build,E., C:\Windows\Microsoft,NET\Fram., 184.8 KB 8/31/2009 2/1/2016 xml (XML Doc., SYSTEM	
		Microsoft Build T C:/Windows/Microsoft NET/Eram 419.8 KB 8/31/2009 2/1/2016 xml (XML Doc. SYSTEM	
-		Microsoft,Build,U., C:\Windows\Microsoft,NET\Fram., 82.6 KB 8/31/2009 2/1/2016 .xml (XML Doc., SYSTEM	
		MicrosoftJScript C:\Windows\Microsoft.NET\Fram 697.1 KB 8/31/2009 2/1/2016 .xml (XML Doc SYSTEM	
		Microsoft.VisualB C:\Windows\Microsoft.NET\Fram 134.8 KB 8/31/2009 2/1/2016 .xml (XML Doc SYSTEM	
		Microsoft.VisualB C:\Windows\Microsoft.NET\Fram 718.0 KB 8/31/2009 2/1/2016 .xml (XML Doc SYSTEM	
		Microsoft.VisualB C:\Windows\Microsoft.NET\Fram 9.6 KB 8/31/2009 2/1/2016 .xml (XML Doc SYSTEM	
		Microsoft.VisualB C:\Windows\Microsoft.NET\Fram 875.4 KB 8/31/2009 2/1/2016 .xml (XML Doc SYSTEM	
		CAME ACTIVATION CAME AND A DECIMA NET FILM 2.0 PD 0/01/0000 2/1/0016	
	3,401 Objects (1,442,600.4 KB) 13,2	28 Objects checkmarked (9,283,659.0 KB)	

- 1 The Ribbon Bar for 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 [103]" 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
 - Temporary Files
 - Internet Files 111
 - Duplicate Files [11]
 - Custom Search

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.
- 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 panel."
- **5** The status bar sums up information regarding the currently shown search . results.
- **6** The <u>Quick Access Toolbar</u> (32) is a customizable shortcut to many useful . functions of the TreeSize File Search.
- **7** The <u>drive list panel</u> 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** 101 Enables you to select folders to search in and load or save your search results and search options.
- **Home** 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** Contains useful functions and settings of the file search.
- Help Tool Provides common help features, version information, and management functions for your product license

File

File			
K	Select directory for search		Recently used search settings
\$P	<u>S</u> earch settings	×	1 C:\Oldest_Files_Server_Helix.xml 2 C:\Compressed_Files_Over_1G_2012.xml
	Export	×	
***	Lis <u>t</u> of paths	×	
Z	<u>P</u> rint list	×	
*	Optio <u>n</u> s		
1	<u>A</u> bout		
	E <u>x</u> it		
Brows	se and add path S	how	vs a dialog which lets you select a director

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 10^{-10} .	
	Please note: Use "Home > Search paths" to see the complete list of searched drives and paths.	
Load search options	Loads previously saved search options from an XML-file.	
Save search options	Saves the current search options in an XML-file.	
Reset search options	Resets the current search options to their default values.	
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 files (.html)".	
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.	
About	Shows version number and contact information.	

Exit

Exits the TreeSize File Search.

Home

B O B □ = TreeSize Professional - File Search File Home View Tools Help	- 🗆 X
Start Stop Search Edit Undt	leck all beck if ove invalid elements Image: Construction of the second secon
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 clipboard. To insert them in a new location, use "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.
Uncheck all	Unchecks 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.
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 manual deletion of files via Windows Explorer, it be possible that previously found duplicate sea results have become invalid. This function check	

	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 files (.html)".	
Email	Sends an email that contains the current search results.	
File Operations		
Delete items	Deletes all checked search results.	
	See "Move checked files 121".	
Move items	Moves all checked search results to a destination of your choice.	
	See " <u>Move checked files</u> [121]".	
Burn	Burns all checked search results to an optical media.	
	See " <u>Move checked files</u> [121]".	
Archive	Archives all checked search results in a ZIP file.	
	See " <u>Move checked files</u> [121]".	
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 121".	

View



ТВ	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.
В	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.
	The available columns are: "Path", "Extension", "Size", "Allocated space", "File type / Matching criteria", "File owner", "Attributes", "Creation date", "Last access date", "Last change date", "Path length", "Directory level", "Hardlinks", "Version", "Permissions", "Author", "MD5 checksum", and "SHA256 checksum".
	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.
Details pane	Toggles a panel to the right of the result list, showing detailed information and a thumbnail image of the first currently selected file or directory.

Tools

💫 i 🌘) 🖹 🔚	↓ Tre	eeSi	ze Profes	sion
File	Home	View	/	Tools	1
Schee	Jule E	in the second se	Op	otions	
current s	Tool	s			

Tools

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 " <u>Schedule Dialog</u>
Start File Search 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.
Empty recycle bin	Deletes all items in the recycle bin to free up disk space.
Options	Opens the <u>options dialog</u> [65], which allows to change the current search settings.

Help



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.	
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.
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.

	List Actions	Export	File	e Operations	Search Options	
	🖵 \\Intranet\Install 🐁 C:\ 🕚					\sim
	Name	Total Size	Free Space	% Free Space		
	🗹 🏪 Local Disk (C:)	39.4 GB	18.1 GB	46 %		
	🗌 🚍 temp (\\intranet) (T:)	1.98 TB	1.18 TB	60 %		Cont
74]	🗹 🚽 Install (\\Intranet)	1.98 TB	1.18 TB	60 %]	Size:
981						Alloc
1901						Туре
60]						Last
						Last
(61]						
'09]						
	画 <u>A</u> dd (UNC-)path				💕 Browse and add <u>p</u> ath	
	CustomMarshaler C:\Windows\Microsoft.NET\Fram 13.0 KB 8/31/2009 2/1/2016 .xml (XML Doc S)					
		· · · · · · · · · · · · · · · · · · ·				

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 you 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

Enables you to search for the biggest files in the selected <u>drives and paths</u> 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.

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 <u>Move Items</u> 121 function. The main module of TreeSize is also showing a list of the <u>100</u> <u>largerst files</u> 57.

7.3 Oldest files

This search type detects files or complete directory branches in the chosen drives and paths 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.
Return complete folders only

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

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.

Please note: The <u>Custom Search</u> 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 <u>Move Items</u> f(x) function.

7.4 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 <u>specific</u> 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**":

The criteria defining which files are listed here can be modified by using the pages "Customize Patterns" and "Additional Settings".

Search for files containing the patterns defined below

Active	Pattern	Match Against	Туре	Preview	Delete	Add	^
	*	File or Folder Name \vee	Wildcard \checkmark	Q	0	0	
	*.\$\$\$	File or Folder Name $$	Wildcard \sim	Q	0	•	
	*.??~	File or Folder Name $$	Wildcard \sim	0	9	•	~

Patterns

The main part of the temporary file search is based on typical filename patterns. You can customize these patterns using the tab "**Customize Patterns**" on the top of the search result list. 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 Links without a valid target path	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 Folder	If activated, TreeSize will check for shortcuts from the recent documents folder and list them in the search results.

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 <u>Move Items</u> function.

7.5 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.

Hint: The search for temporary internet files can be automated using the <u>command line option</u> (J45)/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 <u>Move Items</u> 121 function.

7.6 Duplicate files

Searches for duplicate files on the selected <u>drives or shares</u> [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.

Here is a list of the available strategies hot duplicate files shall be identified:

Compare Size, Name and Date	Select this option to identify duplicate files by looking for equal names, sizes and last change dates.
	This is much faster than using check sums to indicate duplicates, but it is also less accurate.
Compare using MD5 Checksum	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. Empty files are ignored, since there is no content to compare.
	This is more accurate then comparing files by their name, size and date but it is also much slower.
Compare using SHA256 Checksum	This search option works like the MD5- Checksum mechanism, but uses the SHA256 algorithm instead of MD5.
	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.

Compare by Name only

Select this option to find all files with equal file names.

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).

There are some additional options to customize the duplicate file search:

Minimum Size in KB	Defines the minimum size for files which are subjected to the duplicates search.
	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.
Ignore NTFS hardlinks	If checked, hardlinks will not be regarded as duplicate files. You can find this setting in the options dialog under <u>"Duplicate File Search" ></u> <u>"Filter"</u> [131].
	Please note: <u>NTFS hardlinks</u> [159] do not allocate any space so you will not free up disk space by deleting them. Also, TreeSize uses hardlinks for the <u>Deduplication</u> [114].
Duplicate filter	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 <u>filter</u> <u>patterns</u> [131] will be excluded from, or restricted to in the duplicate search.
	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.

Context tab: Duplicate Files

B 1 (0 🗈	- -			Search Tools	TreeSize Professi	onal - File Search				
File	Home	View	Tools	Help	Duplicate Files						
Start	X Stop	Duplicate filter	Dy Che by Che by Che	eck all eck if eck all but r	🕼 Uncher 🏷 Uncher ewest 🔻 💦 Remov	ck all ck if e invalid elements	Deduplicate De	elete ems	Move items	Options Exclude	e
Sea	irch	Filter			List Actions		File Oper	rations		Search Options	

Start	This button will start the search. You can see partial search results by selecting one of the tabs while the search is running. TreeSize will trigger an acoustical signal when the search is finished.
Stop	Stops the currently running search.
Duplicate filter	Opens a dialog where you can define filters for the duplicate file search to include/exclude files whose file name, path, or owner match certain patterns.
	Please note: Using a highly selective filter for the duplicate search will remarkably increase the performance of the search, since fewer files have to be compared.
Check all	Checks all items in the active result list.
Uncheck all	Unchecks 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.
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.
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 the additional button "Check all but oldest", which will check all files of the selected duplicates, except the oldest file of each group.

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	This function will replace duplicate files with <u>NTFS</u> hardlinks
	Please find a detailed description of this function below 114.
Delete items	Delete all checked search results.
	See " <u>Move checked files</u> [121]".
Move items	Move all checked search results to a destination of your choice.
	See " <u>Move checked files</u> [121]".
Options	Define the general options that apply to the file search.
	See " <u>Options</u> 124]".
Exclude filter	Shows the list of the global exclude filters, which can also used for the duplicate file search.
	See " <u>Exclude Filter</u> [126]".
	Please note: In case you want to exclude certain files or directories for the duplicate file search only, we recommend adding them to the "Duplicate filter [113]".

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: <u>NTFS hardlinks</u>). However, this will not influence the disk space shown in the "properties" dialog of the Windows Explorer (See: <u>Deduplication FAQ</u>²⁴). 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

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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 [158].

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.

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.

7.7 Custom search

This search type allows you to configure your own search operation using a large variety of search criteria.

🍞 Filt	er Patterns		🎲 Date	🧊 Size / Attributes	👘 🕼 Oth	er Filters						
Active	Action			Pattern		Match Against		Туре		Preview	Delete	Add
	Include	\sim	*.mp3			File or Folder Name	\sim	Wildcard	~	Q.	9	۲
	Include	\sim	admin*			Owner	\sim	Wildcard	\sim	0	۲	۲

The search can be configured on the following tabs:

- Filter Patterns (search for file name, owner or file content)
- **Date** (search for file dates)
- <u>Size / Attributes</u> (search for file sizes and attributes)
- Other Filters [120] (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 <u>Move Items</u> function.

7.7.1 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.

🎲 Filte	r Patterns	🍞 Date	🧊 Size / Attributes	🎲 Oth	er Filters				
Active	Action		Pattern		Match Against	Туре	Preview	Delete	Add
	Include	~ *.mp3			File or Folder Name \sim	Wildcard	~ Q	9	۲
	Include	√ admin*			Owner ~	Wildcard	~ ~	9	۲

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 examle, 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".
- 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 either be matched against the file or folder names, (full) paths, owners, name the parent folder, name of any parent folder, or the file . You can use the owner filter, for example, to include or exclude certain file owners from the TreeSize search 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*"). File or folder name should be used when you intent to include or exclude or exclude certain file content to include or exclude or exclude results. With the full paths is matching a certain pattern (e.g. "*\Program Files*"). File or folder name should be used when you intent to include or exclude or exclude certain file extensions (e.g. "*.tmp"), like described in step 2). Please note: Matching against "file content" can only be applied on plain text files.

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 for the used as patterns by selecting "RegEx" in the Type column.

The following table shows possible patterns:

Pattern	Match Against	Туре	Result
*.doc	File or Folder Name	Wildcard	Searches for all files with the extension "doc".

\Windows\Syst em32.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")

Please note: To search for directories, the option "Include Folders" on the "Size / Attribute [119]" tab must be checked.

7.7.1.1 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.

🕼 Filter	r Patterns	Date	Size / Attribu	utes Other F	ilters				
Active	Action	Pa	ttern	Match A	gainst	Туре	Preview	Delete	Ad
	Include N	Meeting		File Content (Case	Inconsitive)	Whole Name	V Q	8	0
				The content (cast	(insensitive) *	more marie			
]	The content (case	(insensitive)				
					insensitive) •				
] Name		Containing Pa	th	Size	Last Modi	ast Acce Type		Owner	

To get started, create a new include filter as described <u>here</u> here had 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.

7.7.2 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).



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 start and end date of the interval 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:

- entering a start date and an end date: the filters will find only files/folders with a matching date within these boundaries.

- entering only a start date: the filters will only find files/folders with a matching date past the selected date.

- entering only an end date: the filters will only find files/folders with a matching date before the selected date.

- defining how many days must have passed since the file/folder was (not) changed / (not) accessed / (not) created.

Time picker:

Searching for a specific file date can be customized even further by enabling the option "<u>Show time picker in custom search</u>^[126]". This allows to specify a time values in addition to the dates when searching for files within a given time frame.

7.7.3 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.

🎲 Filter Patterns	🎲 Date	🎲 Size / Attributes	🎲 Other Filters		
Minimum Size:	0 🗘 Bytes	✓ <u>A</u> ttributes	✓ Include Files	Include Folders	
Maximum Size:	0 🛉 Bytes	✓ ● set ○ not set	Read-only Hidden System Archive Compressed Snarse		~

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 " <u>compressed</u> [157]" attribute in files/folders.
Sparse	Looks for the " <u>sparse</u> [158]" 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) <u>NTFS Alternate Data Streams</u> [158] included.
Reparse / Mount Points	Lists only files/folders that are (not) flagged as reparse points or mount points [158].

7.7.4 Search with other filters

On this tab you can configure several search filters.

🎲 Filter Patterns	🎲 Date	🎲 Size / Attributes	🎲 Other Filters	
Search subfolders				
Full path longer t	han: 255	Characters		
Ignore NTFS hardlinks				
Minimum Number of hardlinks: 2				

Search subfolders	TreeSize will search not only the current folder but also all sub-folders.
	Please note: This option is activated by default.
Full Path longer than X characters	Sets the minimum size a file's path has to have to be included in the search.
Ignore NTFS hardlinks	If checked, no <u>NTFS hardlinks</u> will be listed in the search results.
Minimum Number of hardlinks	Use this option to find files with a minimum number of <u>NTFS hardlinks</u> [159].

7.8 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 [104]".

Some 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 Moves all checked files directly to the Recycle Bin. To delete items to these files completely, you have to empty the Recycle Bin. Recycle Bin

Delete Deletes all checked files (a security prompt has to be confirmed). items from disk

Move checked Moves checked files to a ZIP file you specify in the edit field bellow. 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 [124]").

Move checked Moves all checked files to the path you specify in the edit field items to path bellow or burns them to an optical medium. The original or burn to disc 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 Copies all checked files to the path you specify in the edit field items to path bellow or burns them to an optical medium. The original or burn to disc 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 An executable file will be called for every checked file and the executable as 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 <u>FileSystemObject</u> offers powerful and easy-to-use capabilities for file system and path operations. Please find an eaxmaple for the use of a PowerShell Script below.

Move Options:

Keep/Renam e/Replace existing files	 (Renam Configure how TreeSize will handle name collisions in move destination, in case a file with the same name alrees exists. You can keep the existing files, replace them by 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 moving	Deletes all folders that have been emptied due to this move operation.	
Preserve directory structure	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.	
	Please note: Only available for "Zip", "Move", and "Copy" operation.	
Include directory with drive letter to	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 form several drives.	
avoid name collisions	Please note: Only available for "Zip" operation.	
Leave out directories up to level x	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.	
	For example, when moving a file "C:\Users\Smith\My Document.doc" to destination "D:\Obsolete Files" you will get the following results: $x = 0 >$ "D:\Obsolete Files\C\Users\Smith\My Document.doc" $x = 1 >$ "D:\Obsolete Files\Users\Smith\My Document.doc" $x = 2 >$ "D:\Obsolete Files\Smith\My Document.doc"	
	Please note: Only available for "Move" and "Copy" operation.	
Preserve permissions of the original items	If this option is activated, the permissions of the original file will be used for the file in the new location.	
	Please note: Only available for "Move" and "Copy" operation. Not supported when burning to an optical medium.	
Leave shortcut/link at original location pointing to new location	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 <u>NTFS hardlink</u> 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.	

Please note: Only available for "Move" operation.

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 <u>Regular Expressions</u> [161], 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)

7.8.1 Unicode Zip files

TreeSize is able to zip files with file names including characters which are not part of your activated code page (<u>Unicode</u> 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)
- <u>WinZip</u> (V11.2 or higher)
- <u>7-Zip</u> (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 XP, Windows Vista, Windows 7, Windows Server 2003, and Windows Server 2008 are <u>NOT</u> Unicode compatible.

7.9 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 125	General settings influencing the search behaviour of TreeSize File Search.
Exclude Filter	Define filtering options for TreeSize File Search.
View 128	General settings influencing the appearance for the search results of TreeSize File Search.
Export 128	Configure options for export generation of TreeSize File Search.
Email 129	Customize email settings for TreeSize File Search.
Start 130	Defining start parameters for TreeSize File Search.
Duplicate Search	
Filter 131	Configure specific settings just for the Duplicates Search.

7.9.1 General Options

- Search Engine 125
- Exclude Filter
- <u>View</u> 128
- Export 128
- **Email** 129
- <u>Start</u> 130

7.9.1.1 Search Engine

Follow mount points and external symbolic links to directories

You can decide if TreeSize should follow symbolic links and mount points (see <u>Notes on NTFS</u> 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.

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.

7.9.1.2 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.

Apply glo	bal search filter to the following searc	th types		
🗹 Bigge	est Files Search	Internet File Search		
✓ Oldes	st Files Search	Duplicate File Search		
🗹 Temp	oorary Files Search	Custom Search		
Active	Pattern	Match Against	Туре	^
	%SystemRoot%\Sys*	Full Path ~	Wildcard V	
	\\$Recycle.Bin	Full Path ~	Wildcard V	
	\~Snapshot	Full Path ~	Wildcard V	
	\RECYCL	Full Path ~	Wildcard V	
	\WINSXS	Full Path ~	Wildcard ~	
	C:\System Volume Information	Full Path ~	Wildcard ~	
	· · · · · · · · · · · · · · · · · · ·			Y
😧 Ad	d pattern (Q Preview.	

Exclude files and folders that have changed in the past

12 🚔 hours

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 <u>duplicate file search</u> and to the <u>custom search</u> 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".
- 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 rightclick 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).

7.9.1.3 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 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 <u>custom search</u> [115].

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.

7.9.1.4 Export

Header information

You can specify here what additional header information shall be written to the export file.

Add summary information

If this option is set , you will see processed path(s), date/time of the search,total number of files found and other information here.

Add column headers

If this option is set, a line containing the column names will be written before the first search result line.

7.9.1.5 Email

Configure email settings for TreeSize File Search.

Email content

То

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 <u>scheduled scan or search tasks</u> 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.

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.

7.9.1.6 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.

- 7.9.2 Duplicate File Search
 - Filter 131
- 7.9.2.1 Filter

Define filtering options explicitly for TreeSize Duplicate File Search here.

Ignore NTFS hardlinks

If checked, hardlinks will not be regarded as duplicate files.

Please note: <u>NTFS hardlinks</u> boto not allocate any space so you will not free up disk space by deleting them. Also, TreeSize uses hardlinks for the <u>Deduplication</u>.

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 <u>Directory Tree</u> [42] as well as any other <u>view</u> [44]. 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".
- 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".



Using Scheduled TreeSize Tasks

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 134.

The dialog allows you to choose one ore 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 <u>Command Line Options</u> 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 36" from within the TreeSize Professional main application or on "Tools > Schedule current search 36" from the TreeSize Professional File Search.

The TreeSize tasks can be configured, viewed, and edited using the following tabs:

Current Task

Options 136	Contains general options, such as the scan path, sorting, or filter that you want to apply to your scan results.
Export 137	Allows to define which in which formats you want to export your reports in this task.
Move Operation (140) (TreeSize File Search only)	Search results can be moved automatically by this task. This option can be enabled and configured here.
Advanced 141	Provides advanced customization possibilities, such as a custom title for the export, or a

different list separator.

Command Line	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 143	Here you can set up a date and time when the task should be executed.
All Tasks	
List of Tasks 144	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.

A TreeSize Professional -	Task Scheduler	×
_ '	Manage Scheduled Tasks Create new task	
Current Task Options Export Advanced Command Line Schedule All Tasks List of Tasks	Path(s) to scan c:\windows Options File Use saved gptions: Export Options Sort By: Last used in user interface Size Unit: Use setting from "Options" > "Export" Size Unit: Use setting from "Options" > "Export" ✓ Include units in export Expand ● To level 1 ● Folgers > 1 ● Full Filter □ Exclude following file types: □ Include only following file types: □ Include only files with Archive attribute set	
Help (F1)	Save Task Close	

Path(s) to scanEnter 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 fileUse 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 [28]"; settings of the TreeSize File Search can
be exported through "File > Save search options [101]".

Export Options

Sort By Choose a <u>view type</u> [38] 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.

- 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

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.

🔕 TreeSize Professional - T	ask Scheduler	×
	Ianage Scheduled Create new task	i Tasks
Current Task Options Export Advanced Command Line Schedule	Directory tree Export Excel file: Contemporation Directory tree Export Directory tree Export Directory tree Export Sheet name:	rated sheet name (including date and time)
All Tasks List of Tasks	HTML file: Text file: XML file: PDF file:	C:\Reports\TreeSize.html
	Print report: Send email: Attach generated	First page only Il pages
	Right Pane Export Top 100 files Statistics on file types Statistics on user nam Pie Chart	s: hes: C:\Reports\Piechart.png
	Add date and time to t	filenames 2
Help (F1)		Save Task Close

Directory Tree Export

Excel file	Exports the collected data to Excel and saves it under the selected file name.	
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."	

HIML 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: " <u>Compare with saved scan 36</u>]").
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.
Right Pane Export	
Right Pane Export Top 100 files	This option allows you to save the " <u>Top 100 Files</u> 57" of the scanned file system branch to an Excel, CSV, or text file.
Right Pane Export Top 100 files Statistics on file types	This option allows you to save the " <u>Top 100 Files</u> 57" of the scanned file system branch to an Excel, CSV, or text file. This option allows you to save the " <u>Extensions</u> 52" statistic of the scanned file system branch to an Excel, CSV, or text file.
Right Pane Export Top 100 files Statistics on file types Statistics on user names	This option allows you to save the " <u>Top 100 Files</u> <u>57</u> " of the scanned file system branch to an Excel, CSV, or text file. This option allows you to save the " <u>Extensions</u> <u>52</u> " statistic of the scanned file system branch to an Excel, CSV, or text file. This option allows you to save the " <u>Users</u> <u>53</u> " statistic of the scanned file system branch to an Excel, CSV, or text file.
Right Pane ExportTop 100 filesStatistics on file typesStatistics on user namesChart export	This option allows you to save the " <u>Top 100 Files</u> 5 " of the scanned file system branch to an Excel, CSV, or text file. This option allows you to save the " <u>Extensions</u> 5 2" statistic of the scanned file system branch to an Excel, CSV, or text file. This option allows you to save the " <u>Users</u> 5 3" statistic of the scanned file system branch to an Excel, CSV, or text file. 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.

Append to existing file Activate this option to append the selected exports to existing files.

8.1.3 Move Operation Tab

Here you can configure move operations to be performed automatically after the TreeSize File Search has finished.

💫 TreeSize Professional - Task Scheduler		
	fanage Scheduled Tasks Create new File Search task	
Current Task Options Export Move Operation Advanced Command Line Schedule All Tasks List of Tasks	Move Search Results No move operation Move checked files to Recycle Bin Move checked files to ZIP file Move checked files to path or burn to disc Pass files to executable as parameter Destination:	
Help (F1)	s	ave Task Close

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 121" operation.

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.

C TreeSize Professional - Task Scheduler		
M	anage Scheduled Tasks Create new task	
Current Task Options Export Advanced Command Line Schedule All Tasks List of Tasks	Advanced Settings	TreeSize Report
Help (F1)		Save Task Close

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 [137]" 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 " <u>View > Group scans</u> [38]" from the main user interface. See topic <u>Directory Tree</u> [44] 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).

8.1.5 Command Line Tab

In this tab you can view the full command line of the currently configured task.

S TreeSize Professional - Ta	sk Scheduler	×
	anage Scheduled Tasks Create new task	
Current Task Options Export Advanced Command Line Schedule All Tasks List of Tasks	TreeSize.exe /EXPAND 1 /TITLE "TreeSize Report" /FILTER "*.exe" /HTML "C: \Reports \TreeSize.html" /PIECHART "C: \Reports \Piechart.png" "c: \windows"	
Help (F1)	Save to Batch File Test command line To Clipboard Save Task Clipboard	ose

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.

🔕 TreeSize Professional - Ta	ask Scheduler	×
	lanage Schee Create new task	e duled Tasks ^{sk}
Current Task	Schedule Interval	/al
Options Export	Start:	D <u>a</u> te: 4/27/2016 <u>□▼</u> <u>T</u> ime: 2:00 PM ►
Advanced Command Line	Once	
Schedule All Tasks	O Daily:	Every 1 day(s)
List of Tasks	⊖ Weekly:	Every week, on Monday ~
	O Monthly:	O <u>n</u> day of every month
Help (F1)		Save Task Close

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 (on all specified days), starting at the date and time specified under "Start at".

8.1.7 All Tasks Tab

Shows a list of all scheduled Windows tasks that trigger an execution of TreeSize.

Contractive Professional - Task Scheduler					
	Manage Scheduled Tasks Scheduled tasks				
Current Task Options Export Advanced Command Line Schedule All Tasks List of Tasks	Name O TreeSize (once 2016-04-27 12-0 TreeSize (once 2016-04-27 14-0	Command line options /EXPAND 1 /TITLE "TreeSize Report" /FILTER " /EXPAND 1 /TITLE "TreeSize Report" /FILTER "	Schedule options At 12:00 PM on 4/27/2016 At 2:00 PM on 4/27/2016	Run as QAVM-111\vmu QAVM-111\vmu	Last Status The operation C The task has n

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:

Delete Task	Deletes the currently selected task.
Edit Task	Allows you to load the currently selected task into the schedule dialog, so that it can be modified.
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.
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 <u>Schedule dialog</u> 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

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:\"

APPENDT 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.

/ARCHIVEBI This option will include only files for which the archive bit set in
TFILESONL
Ythe 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 Saves the bar chart of the scanned directory to a bitmap, GIF, <filename> 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 Compares the scanned path with a saved XML report. The <filename| path> following example scans drive C: and compares the result with a saved XML report for this drive:

Treesize /COMPARE "C:\Reports\TreeSize\c.xml" "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" and "c2.xml" by using this command :

Treesize /OPEN "C:\Reports\TreeSize\c1.xml" /COMPARE "C: \Reports\TreeSize\c2.xml"

The /OPEN command prepares the comparison of the two files by expanding the first file ("c1.xml") into a scan file. The second file ("c2.xml") will be compared to this expanded scan file, just like it would happen, if "c2.xml" was compared to a "real" scan.

/CREATED This option will include only files in the scans, which were PASTDAYS created during the number of days entered in the argument. In ONLY <n> 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 [69] dialog.

/CREATESNCreates a snapshot for the drives that are given after this APSHOT command line paramter. Example:

<drive>

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"

/EMAIL Sends the collected data to the given email address. This <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 sysadmin@company.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 sysadmin@company.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 sysadmin@company.com /EXCEL "\\Server\Share"

/EMPTYRE If you use this option, TreeSize will empty the recycle bin before CYCLEBIN 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 This option enables you to specify patterns for files and folders <pattern1;pa that should be excluded from a scan. Multiple exclude patterns</pre> ttern2> can be separated using a semicolon (;). If one or more of the patterns contain spaces, the complete pattern string must be set into guotes ("). 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

This option lets you specify how many levels in the directory tree <level|size> 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"

/EXPORTDThis option enables you to export the contents of the "DriveRIVESLISTList [60]" to an Excel, Text, or CSV file. The file type depends on<filename>the extension of the specified file name. Example:

Treesize /EXPORTDRIVESLIST "C:\Results\AllDrives.csv"

/EXTENSIO This option enables you to save the statistics on file extensions / NSLIST <filename> Text, or CSV file. The file type depends on the extension of the specified file name. 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:\"
```

/EXTENSIO Saves the small graph shown on the bottom of the NSCHART "Extensions 52" page to an image file (bitmap, GIF, PNG, or <filename> JPEG).

/EXTENSIO Saves a piechart that shows the distribution of "<u>file extensions</u> [52] NSPIECHAR " to an image file (bitmap, GIF, PNG, or JPEG).

Т

<filename>

/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.xls" /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 <u>Custom File Search</u> [115]. To perform a more complex custom file search you should <u>save the search</u> <u>options</u> [101] to a file and pass the resulting XML file to the command line after /SEARCH.

/FOLLOWR If this switch is added to the command line, TreeSize will follow EPARSEPO mount points and external symbolic links when scanning a file INTS system tree.

/GROUPSC Using this command line switch will group all scanned directories ANS under a virtual root folder. Use /GROUPSCANS FALSE if you want to ensure that no virtual root folder is used. /HISTORYC Saves the graph on the "History 58" tab of the scanned directory to a bitmap, GIF, PNG, or JPEG file. The file type depends on the HART extension of the specified file name. This example creates a <filename> JPEG image of the history graph for drive C:

Treesize /HISTORYCHART "C:\Documents\c_history.jpg" "C:\"

/HTML Saves the collected data to a HTML file which can be viewed with any HTML browser. If you also have a /PIECHART <filename> or /BARCHART parameter in your command line, the image will be included in the HTML file (if you also used /NOHEADERS, the image will not be included). The following example will generate an HTML report for the drive C:, including the pie graph image and saves it to "D:\HTML":

> Treesize /HTML "D:\HTML\treesize.html" /PIECHART "D: \HTML\treesize.jpg" "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" /PIECHART "D: \HTML\drive-c.jpg" "C:\" /HTML "D:\HTML\drived.html" /PIECHART "D:\HTML\drive-d.jpg" "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 us the switch /APPENDTOFILES.Without one of these flags, the HTML file will get overwritten.

/LISTSEPAR Enables you to define the separator used when exporting text or ATOR CSV files. Text files use the tabulator by default, CSV-files the list <separator separator from the regional settings of the Windows control panel. Please specify a single character or the string "TAB" for char> tabulator after this switch. Examples:

> Treesize /LISTSEPARATOR ; /TEXT "C:\Results\c.txt" "C:\" Treesize /LISTSEPARATOR TAB /TEXT "C:\Results\c.csv" "C:\"

/MOVETO This option can only be used in combination with the command <path|zip line option /SEARCH

file Recycle It moves the results of a TreeSize file search and to another location, ZIP file, the recycle bin, or passes them to an executable> 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:\"

Bin"

This example will load <u>saved search options</u> 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 121

/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.

- /NOHEADE 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(1) options. /EXTENSIONSLIST, /USERSLIST, /EXPORTDRIVESLI ST, or /TOPFILESLIST will not be effected.

/OPEN Opens a saved XML report 29 on application start. Example:

<filename> Treesize /OPEN "C:\Reports\Drive_C.xml"

/OPTIONS Use this parameter to apply exported user settings to TreeSize. <filename> User settings can be exported at "File > Options > Export". Example:

Treesize /OPTIONS "C:\Temp\User Settings.xml"

Hint: Change as many settings a 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 Saves the pie chart of the scanned directory to a bitmap, GIF, <filename> 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"

/PRINT1 Prints only the first page of a report for each scanned folder/drive. The application will be terminated after printing. Example:

Treesize /PRINT1 "C:\" "D:\"

- /RESTRICT Starts TreeSize in a restricted mode in which many features are ED 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 <u>Startup Paths</u> [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 Scans all paths that are found in the text file specified after this <filename> 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 154.

/SEARCH[:< Opens the File Search [99] window of TreeSize. If ":Start" is added Start| Internet>] with the last settings. A previously saved XML file containing search settings [101] 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 at 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 <u>temporary internet files</u> and automatically delete them. 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 <u>custom search</u> using the /FILTER command line option.

/SHEETNAM Enables you to specify the name of the sheet that will be added to an Excel file when using the <u>/EXCEL</u> 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.

/SHORTDA Alters the short date format for this process, which can be TEFORMAT configured in the regional options of the Windows Control Panel. <format> Exports of TreeSize will use this format for date values. Example:

Treesize /SHORTDATEFORMAT YYYY-MM-DD /TEXT "D:\export.txt"
"E:\"

/SIZEUNIT 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.

/SORTTYPE Enables you to specify by which value the generated exports will <0|1> be sorted. Use the value 0 to sort by name and the value 1 to sort by size. The last used sort type in TreeSize will be used by default. Example:

Treesize /SORTTYPE 1 /TEXT "D:\export.txt" "E:\"

/SUBJECT This option allows you to customize the subject that will be used **<subject>** for emails that are sent at the end of the scan. Example:

> Treesize /EMAIL <u>sysadmin@company.com</u> /SUBJECT "TreeSize Professional Scan Report" "\\Server\Share"

/TEXT Saves the results to a text or CSV file after the scan or search is <filename> 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></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\$"
	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.
/TOPFILESL IST <filename></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 /TOPFILESLIST "C:\Temp\C_top_files.txt" "C:\"
/TREEMAP <filename></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:\"
/USERSLIS T <filename></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 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:\"
/USERFILTE R <username></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"
/USERSCH ART <filename></filename>	Saves the small graph shown on the bottom of the " <u>Users</u> [53]" page to an image file (bitmap, GIF, PNG, or JPEG).
/USERSPIE CHART <filename></filename>	Saves a pie chart that shows the " <u>user statistics</u> ⁵³]" of the current scan to an image file (bitmap, GIF, PNG, or JPEG).
/XML <filename></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" "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 though 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" "C:\Program Files\JAM Software\TreeSize
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 [134]" of TreeSize will help you setting up a scheduled task.

You can also use the "at" 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:

at 03:00 "C:\Program Files\JAM Software\TreeSize Professional\Treesize.exe" /EXCEL "C:\Temp\tsp.xls" /EXPAND 2 "C:\" "E:\"

If you want to see the results of the file search on your screen when you arrive at your office in the morning, you might use something like: at 06:00 /INTERACTIVE "C:\Program Files\JAM Software\TreeSize Professional\Treesize.exe" /SEARCH:Start

Read more about the "at" command in the Windows help.

Please note: Error messages occurring during scheduled scans are listed in the systems Windows event log.

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"" ""C:\"""
```

Tips & Annotations

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 <u>Scheduled Scans</u> and save the results to a XML file which can be loaded again later.
- Use the <u>TreeSize File Search</u> 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 <u>http://www.jam-software.com/spaceobserver/</u>

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 <u>Options</u> ⁷¹ 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 <u>sparse files</u>. 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 <u>Option</u> [67] "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 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 Descriptior (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 <u>Options</u> of 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 file" 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 "Svstem 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 18:

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 * 32KB = 320KB of disk space, and 320KB - 10KB = 310KB 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 <u>NTFS file</u> <u>system</u> 157. It usually operates with a cluster size of 4KB and so stores small files more effective.

9.3 TreeSize Column for Explorer

TreeSize ships with a shell extension that adds an additional column to the Windows Explorer (Windows XP/2003 only). It shows the size not only for files but also for folders. This feature is intended for a quick overview. The column can be activated using "Choose Columns/Details" in the "View" menu of the Windows Explorer or through the context menu of the column headers of the Windows Explorer. If you would like to enable this column in the Windows Explorer for all folders, then you have to configure this in the "Folder Options" of the Windows Explorer using the button "Apply to All Folders". This column requires Windows XP/2003 and can be configured or fully turned off in the Options 96 dialog. On 64 bit systems, the .NET Framework 2.0 or higher is required.

😂 Program Files				
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Folders X	Name A	Size Type	Date history	TreeSize
	ComPus Applications ComPus Applications Thermet Explorer JaM Software Messenger Movie Maker MSN MSN Gaming Zone NetMeeting Online Services Outlook Express Windows Meda Player Windows MT Xerox	File Folder File Folder	14.0 ✓ Size 11.0 ✓ Type 11.0 ✓ Date Modified 07.0 Date Created 11.0 Attributes 11.0 ✓ TreeSize 11.0 Connerts 11.0 Title 11.0 Author 11.0 TreeSize 11.0 TreeSize 11.0 TreeSize 11.0 TreeSize 11.0 Comments 11.0 Artist 11.0 Genre Duration Bit Rate Protected More	18,1 M8 0,0 M8 1,0 M8 2,0 M8 0,0 M8 9,8 M8 20,6 M8 8,3 M8 3,1 M8 4,1 M8 3,1 M8 3,1 M8 3,1 M8 0,0 M8

Unfortunately it is not possible to provide such an extension for the Explorer of Windows Vista or higher, because Microsoft has removed the used interface from this version of Windows. Microsoft has officially confirmed that a similar extension of the Explorer is not possible under Windows Vista or higher.

Please note:

- Available on Windows XP and 2003 only.
- You have to choose Install TreeSize column for Windows Explorer within the TreeSize Installation. Otherwise the TreeSize column will not be available.

9.4 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:

Expressio n	Syntax	Description	Example				
Any character	•	Matches any single character except a line break.	a.o 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.	 a*b matches "b" in "bat" and "ab" in "about". e.*e matches the word "enterprise". 				
One or more	+	Matches at least one occurrence of the preceding expression.	ac+ matches words that contain the letter "a" and at least one instance of "c", such as "race", and "ace". a.+s matches the word "access".				
Beginning of word	<	Matches only when a word starts at this point in the text.	<in "inside"<br="" as="" matches="" such="" words="">and "into" that begin with the letters "in".</in>				
End of word	>	Matches only when a word ends at this point in the text.	ss> matches words such as "across" and "loss" that end with the letters "ss".				
Any one character in the set	٥	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].	be[n-t] matches "bet" in "between", "ben" in "beneath", and "bes" in "beside" but not "bel" in "below".				
Any one character not in the set	[^]	Matches any character that is not in the set of characters that follows the ^.	be[^n-t] matches "bef" in "before", "beh" in "behind", and "bel" in "below", but not "ben" in "beneath".				
Or	Ι	Matches either the expression before or the one after the OR symbol (). Mostly used in a group.	(sponge mud) matches "sponge bath" and "mud bath.				
Tagged expression	١	Matches the character that	\^ searches for the ^character.				

(or backrefere nce)		follows the backslash (\) as a literal. This lets you find the characters that are used in regular expression notation, such as { and ^.	
Markierter Ausdruck	ð	Matches text that is tagged with the enclosed expression.	{does}n't 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	^n	Matches n occurrences of the preceding expression.	[0-9]^4 matches any 4-digit sequence.
Grouping	0	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 [a-z][1-3] or [0-9][a-z] , you would combine them: ([a-z][1-3]) ([0-9][a-z]).

Further examples:

[0-9]/ or /\d	Find all files/folders with at least one digit in its name.
alb	Find all files/folders containing "a" or "b" in their name.
[^(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

	norm	al s	space	e chai	racter.					
[~,\",#,%,&,*, \:,<,>,\?,V,\{, ,}]	Find name	all e wl	files hich a	and are in	folders, valid on s	that Shar	contain e Point s	characters ervers.	in	their

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 <u>here</u>.

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)

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VAT ID No.:	DE234825349
Managing Director:	Joachim Marder

- / -

/EXCEL 145 /RESTRICTED 145

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