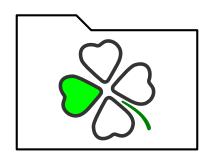
CLFiler V1.74



Manual V1.8

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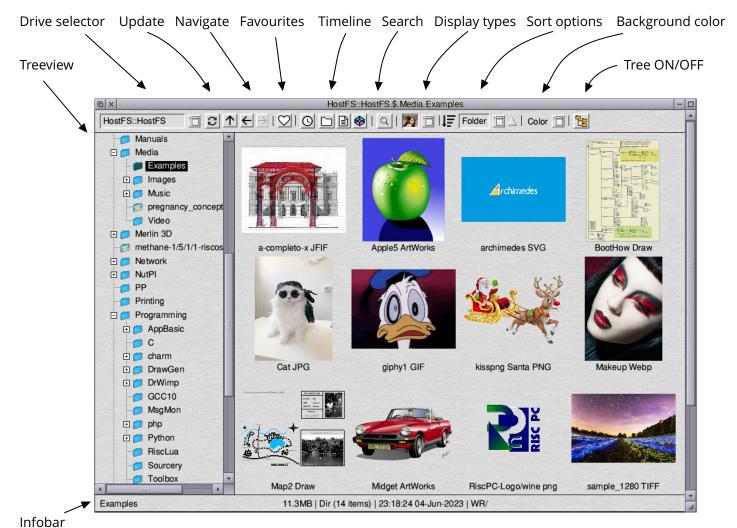
Introduction

!CLFiler is part of our RISC OS modernization initiative. We executed crowd funding on Kickstarter.com in 2021 to find funders to support our goals to promote RISC OS and receive funds to develop multiple areas of RISC OS.

!CLFiler is intended to replace the legacy RISC OS Filer which lacks many features found in other popular operating systems.

- Drag & Drop files to folders (= directories) (with confirmation)
- Folder tree
- Thumbnails for image files (Sprite, JPEG, JFIF, GIF, PNG, WebP, TIFF, SVG, Movies) (184 px, 92 px, 48 px, 24 px)
- Support of standard key short-cuts (CTRL+A, CTRL+C, CTRL+V, CTRL+X, Delete)
- Better support for keyboard inputs
- Search for file names
- Support for long file names
- Display of folder sizes
- Alternative folder displays to detect big files or big folders (2D boxes (Treemap) & 2D bars)
- Timeline for last used files, folders, and applications (currently only when started from CLFiler)
- Customizable background colors for folders
- Integrated Image viewer
- Image viewer offers image conversion and scaling.

Overview



Installation

To install !CLFiler you just copy it from the ZIP file to the desired location on your drive.

You should also download and install !ImageMagick for image processing and !FFmpeg for movie thumbnails.

Before starting !CLfiler you also need to install some modules in !Boot.

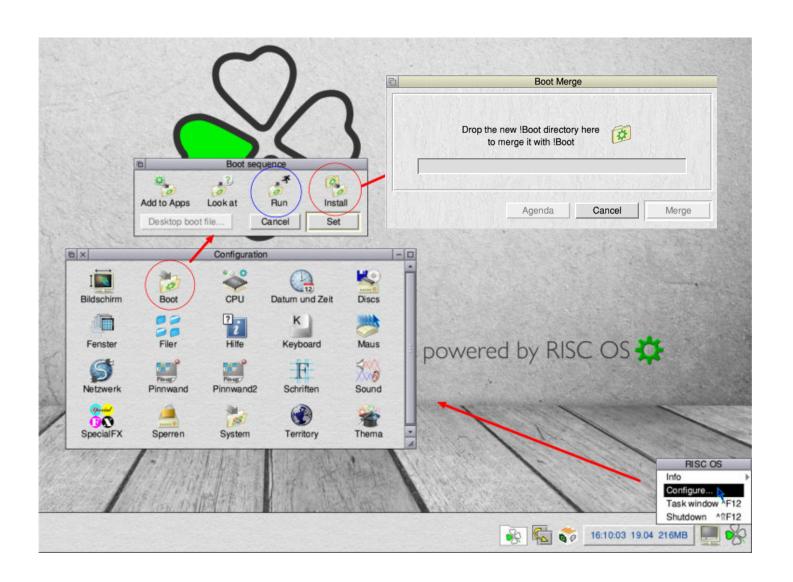
Please use the official install option of RISC OS.

!CLFiler is developed with GCC, toolbox, and TBX library.

In addition it uses the Treeview module.

Update !Boot

- 1. Go to RISC OS system icon (Acorn logo, Cog (RO5), Cloverleaf) and open the menu and choose "Configure".
- 2. Click on "Boot" next.
- 3. Click on "Install"
- 4. Drag the !Boot folder of the !CLFiler ZIP file onto the "Merge Boot" window.



Auto-run !CLFiler on start-up

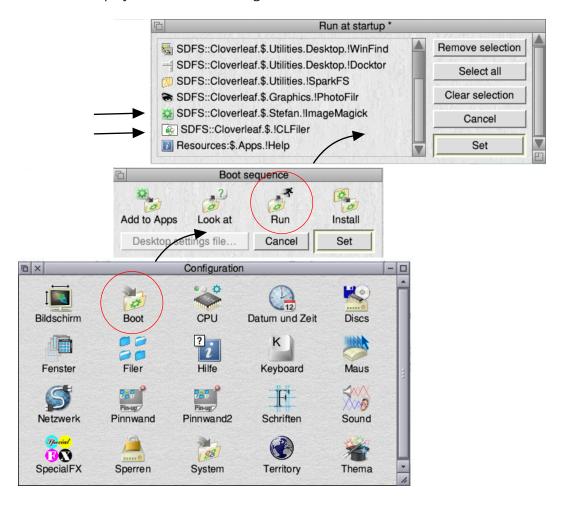
It is advisable to add !CLfiler to the "Run at startup" list to have it available all the time.

Auto-run !CLFiler

If you want that !CLFiler is available directly on the start-up of RISC OS:

- 1. Copy !CLFiler where you want to save it on your hard disc
- 2. Drag the !CLFiler onto the Run icon on the Boot sequence window.

The same you need to do with !ImageMagick and !FFmpeg if you want to see all available image formats as thumbnails and display them in CLFiler image viewer..



Install !ImageMagick

!CLFiler uses the open-source software ImageMagick www.imagemagick.org to load, save and display additional image file formats. You find the RISC OS version of ImageMagick at the following link:

Download Software Floating Point version for old Acorn Hardware and RISC OS Emulators (RPCemu & VirtualRPC) https://www.riscos.info/packages/arm/Graphics/imagemagick_6.9.12-0-1_arm.zip

Download Hardware Floating Point version for Raspberry Pi and RK3399 hardware (PineBook Pro) https://www.riscos.info/packages/arm/Graphics/imagemagick_6.9.12-19-1_vfp.zip

Install !FFmpeg

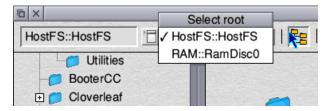
FFmpeg www.ffmpeg.org is needed to display thumbnails for videos.

Download FFmpeg from Chris Gransden website.

https://www.riscosports.co.uk/eabi/

Drive selection

You can select the drive from the task-bar menu or on left top of the window. Click on the drop-down icon to see the available drives list.



Add undetected filesystems (FS)

You may add manually some not detected filesystems (FS) or root directories in the

"!Boot.Choices.CLFiler.predefined-roots" text file. Any entries in that file will be added to the drive selector list (if actually present).

This is a workaround for not automatically detected file systems.

The syntax for text file "predefined-roots" is simple. Write every root path, like you see it in the legacy RISC OS IFiler, in a new line, like this:

Fat32fs::SSD_FAT NFS::Ti_FAT

Lanman98::Ti_FAT

Refresh (F11)

Refresh will check all connected drives and add or remove drives if deconnected. It also forces an update of the current selected folder.

Treeview

One of the main advantages of !CLFiler over the legacy RISC OS filer is the tree view of the drive folder structure.

With the tree view you can navigate faster through your drive's content and you have a better overview of the available folders.

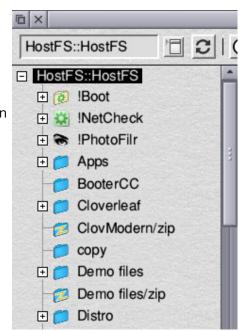
When you select a folder it is automatically opened and the content is shown in the folder view on the right side of the tree.

If there are subfolders then a "+" is shown and it will show the subfolder content when you click on the "+" or the folder name.

As standard setting only folders are shown.

Optionally you can add in "Choices":

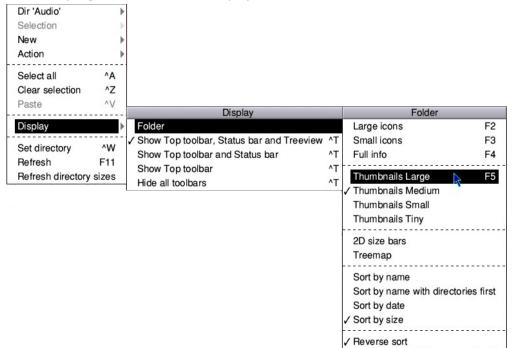
- (!) Pling folders = RISC OS applications
- FS images supported by !SparkFS like ZIP files.



Folder display types

You can choose between different display types to show the folder content.

The type you can select in the top bar or the program menu under "Display".



Large

This is similar to the RISC OS filer "Large" but it supports long file names.

Small

This is similar to the RISC OS filer "Small" but it supports long file names.

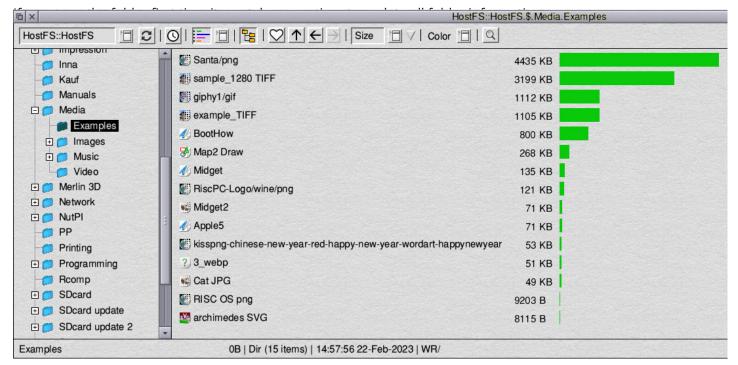
Full info

This is similar to the RISC OS filer "Full info" but it supports long file names.

2D bars

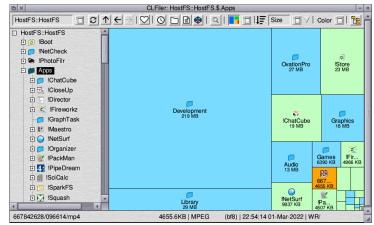
This shows the size of the file or size of directories as bars.

Additionally the sizes are shown as values and the file names support long names.



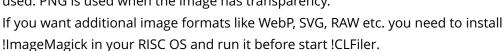
2D boxes (Maptree)

This shows the size of the files or folders as boxes. This folder display makes it easier to determine where the largest files are located or where there are a lot of small files on your drive .



Thumbnails Large

It shows the thumbnails in size of 180 x 180 pixels. If no images exists or smaller images the display is automatically downgraded to Medium or Small thumbnail display mode. As Standard the RISC OS image types Sprites, JPEG, GIF, PNG, Draw and Artworks are supported. For bigger sized images a thumbnail is stored in !Boot.choices.CLFiler.thumbnails. For these thumbnails JPEG and PNG formats are used. PNG is used when the image has transparency.



If you want to see thumbnails of movies you need to install !FFmpeg. Please check chapter "Installation" for this.



Thumbnails Medium

This shows the thumbnails in size of 90×90 pixels. If no images exists or smaller images the display is automatically downgraded to Small thumbnail display mode. If the horizontal box size is forced to be bigger width because of file names the image width is increased also to a maximum of 180 pixels. This thumbnail example shows the effect as normally the car should be displayed with a width of 90 pixels but as the boxes for each file have a bigger width the thumbnail can use a bigger horizontal area.



Thumbnails Small

This is same display as RISC OS filer "Large" and shows the thumbnails in size of 45 \times 45 pixels.



Thumbnails Tiny

This is same display as RISC OS filer "Small" and shows the thumbnails in size 22 x 22 pixels

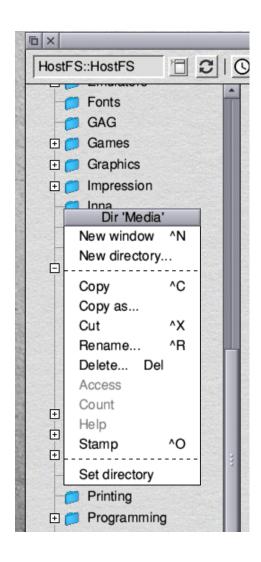


Jump to file name

If you open a folder with many files you have the option to find the desired file by typing the first letter of the file and the display will scroll down to the first file that matches that letter. Successive pressing the same letter will jump to the next occurrence of the same letter. If you are searching for a file name that could be located in multiple folders then use the search function instead.

Tree view menu

The tree view has it's own menu.



Infobar

In the infobar on the bottom of the window you can see additional information. It also show infos when copying files.

Drive info

When you select the root of the drive in the tree view it will show free and occupied space of your drive.

Total: 475.6GB | Free: 29.4GB

File info

!NetCheck 75.3KB | Application (2000) | 02:10:01 13-Dec-2021 | WR/

Selection info

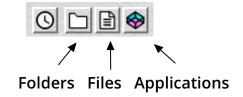
3 selected items 36.8MB

Copy action info

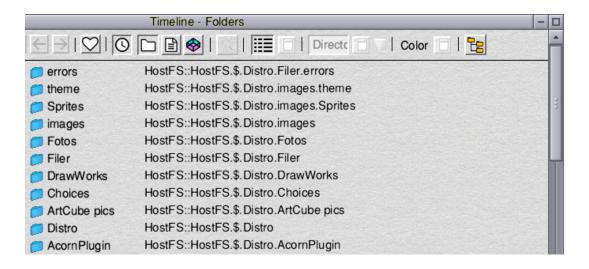
6 items will be copied if you select Paste command

Timeline function

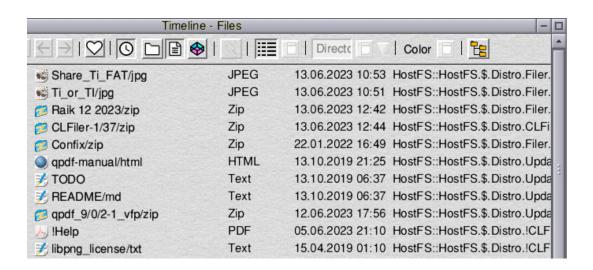
The timeline function shows you the history of used files, folders and programs. To deactivate the timeline you click **a second time** on the timeline icon or on the timeline type icons (Folders, files or applications).



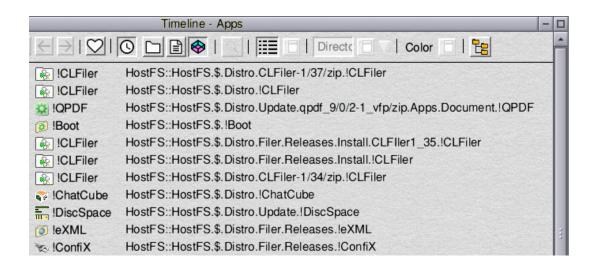
Folders



Files

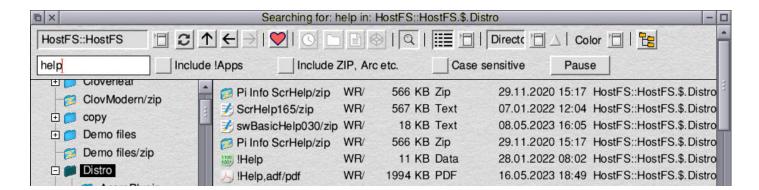


Programs



Search

With the search function you can find any file name on your storage devices. It starts from the selected folder and includes all subdirectories.



Options

Case-sensitive

The standard setting is *case-insensitive* search so if you need *case-sensitive* search you need to activate the radio button for case-sensitivity.

Include FS image files

If you want to include into the search also ZIP files or other compressed files that are supported by !SparkFS then you need to activate "Include ZIP, Arc etc.".

Include !Apps

Also you can activate that the search includes RISC OS application directories so-called "Pling folders". If you activate this option and select the root folder of the boot drive it will also search the system folder !Boot.

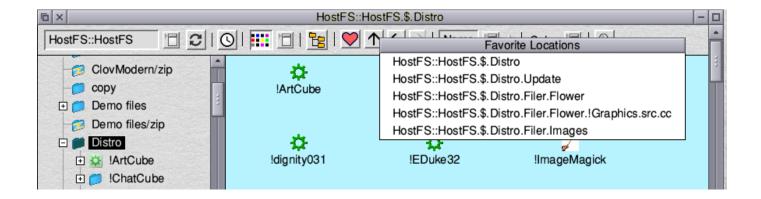
Favourites 💙

The favourites function enables you to get to your favourite folders in the fastest way.

To define your *favourites* you select the folder in the tree view and then open the program menu and use the "Action" menu to add the folder to *favourites*.

If the folder is already in favourites then you can remove it by the "Action" menu.

A favourite folder is marked by the heart icon with red filling. If the folder is not a favourite it has a grey filling.



Selection menu

The selection menu offers the same function than the legacy RISC OS filer but there are some improvements.

Key shortcuts

One of the main differences is that it offers the key shortcuts that are known from other OSs Del, Ctrl+C, +X, +A, +Z and + V. But this is also configurable in the Choices in the task bar menu of !CLFiler. Also most popular functions are linked to a key shortcut.

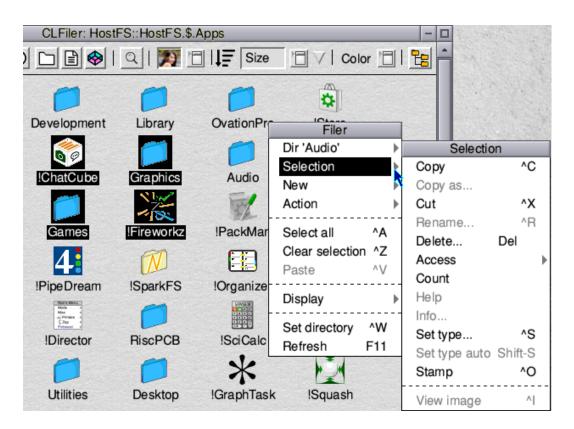
Copy as

With this function you can make a copy of the selected file with another name. Currently it works only in the same folder.



Special feature: Selected or Mouse-hover file

We have added a distinction of the "Selected files menu". You get two choices when you have made some file selections but open the filer menu over another file that doesn't belong to the selected files. It will show then both the selected file name and "Selection" as choices to go to the submenu.



Set filetype (CTRL + S)

This will show also a list of file type choices.

Auto set type (SHIFT + S)

This function allows to set the file type automatically by file name extensions from MS Windows or Linux. It can be used also to correct the RISC OS file types when you compressed RISC OS files by another OS. If there is any file types missing you can alter the file !*CFiler.autofiletypes*.

Example entry: a76:EPUB or a66:webp

Windows / Linux file extensions

For example: .jpg, .txt, png, .doc

On native RISC OS systems these file types are handled by the Mimemap. But in emulator like RPCemu this is not implemented. So if you copy Windows files into your RISC OS hostFS then you always have to set the file type manually. As this can get quiet annoying we implemented an automatic file type setting that will set all selected files by the file extension to the according RISC OS file type. This is configured in the *!CLFiler.autofiletypes* text file.

RISC OS file name extensions

The RISC OS file type can be 'lost" when RISC OS files have not been copied by the RISC OS filer. For example when you ZIP RISC OS files by Windows and not RISC OS !SparkFS. You can see them when you open the ZIP folder the extensions like ",ffe" or ",ffa" etc.

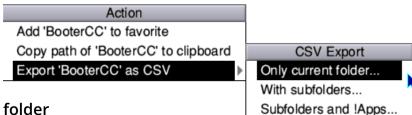
So in that case we just take the extension and set it correctly and remove the visible part.

View image (CTRL + i)

This menu entry is activated if the file is an image. It will open the file by the !CLFiler image viewer. You can do the same by *double select click* on the file. See more details about the image viewer in the *Image viewer* info pages.

Action menu

In the Action menu you find special functions.



Set favourite folder / Remove favourite folder

This will add / remove the current selected folder to the favourite folders list.

Copy file path to clipboard

This will copy the path of the current selected folder to the clipboard.

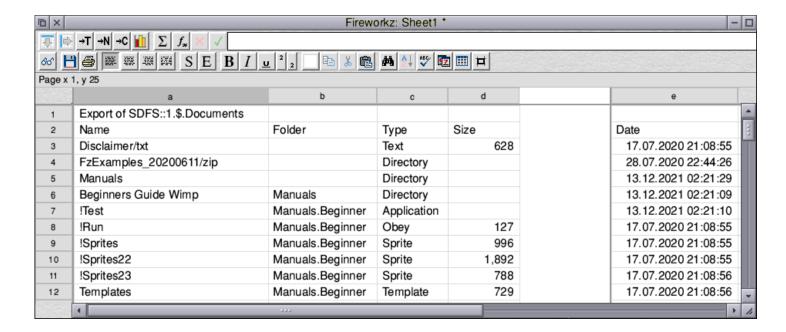
This can be helpful for the command line or for programming.

Export folder to CSV

This function will export the current selected folder content and all it's sub-folders as CSV file.

The data includes is:

- file name / folder name
- folder
- file type
- file size
- file date



Background color for folder

You can set the individual color for folders or drives. All sub-folders will have same background color.

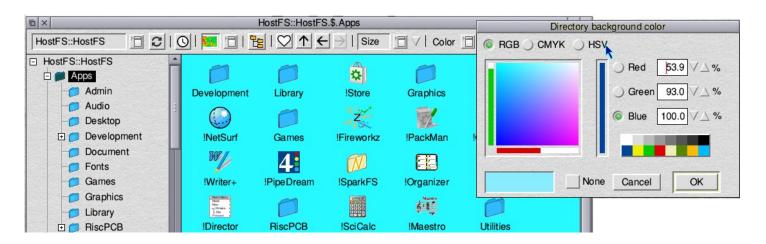


Image viewer

In !CLFiler an image viewer is integrated. The main reason is to enable the RISC OS user also to view image file types that are not supported by RISC OS at this moment. But also for native RISC OS file types (Sprite, Draw or Artworks) it can be useful if you want to convert them to other image formats.

To load an image with the CLFiler image viewer you need to double-right click on the file. If you double-left click then the assigned editing program will be loaded instead. In case there is no editing program assigned for that file type then also the !CLFiler image viewer will be started with the selected file.

Navigate

Once you have opened an image in the folder by the CLFiler image viewer you can display other images by simply pressing **3** and **5** on the keyboard.

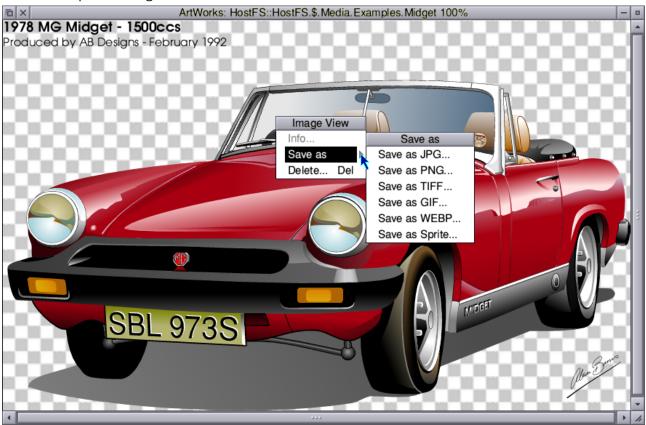
Zoom @ and pan 🖷

When the image is displayed first then it is scaled to the maximum screen width/height with respecting the aspect ratio of the image. If the image is smaller then it is displayed at 100% scale.

You can zoom in and out by the \square CTRL + mouse wheel or by the keyboard keys \bigcirc . If the image is zoomed in then you can pan the content of the window by a mouse drag.

Convert the image

If you want to scale the image up or down (save at another resolution) or save the image as different bitmap format then you can do that with the CLFiler image viewer. When you open the window menu in the image viewer you will see the different option / image file formats to save:



"Save as" dialog

The different bitmap formats offer different parameters like bitmap size, compression quality and background color for transparent images.

Scale image

The presets for the dimension of the image, width and height, are the original bitmap sizes.

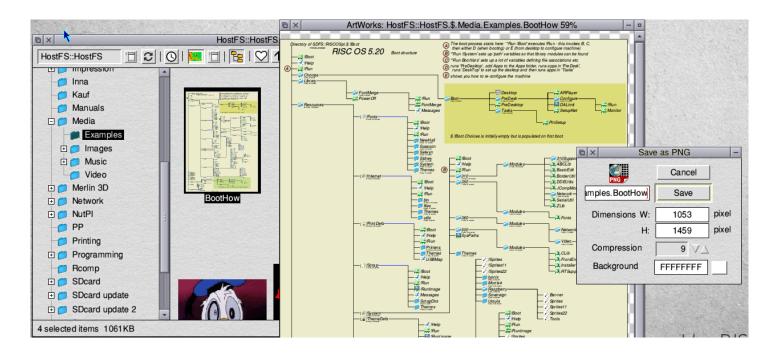
Only for vector files that values are chosen by the program if not set by the file definition.

If you choose any other dimension for width or height it will automatically calculate the corresponding size by the aspect ratio of the image.

For vector files (Draw, Artworks, and SVG) you can choose any dimension and it will generate the best quality at any resolution.

Transparent color selector (Background color)

For all image file types also the transparent color selector is offered. This seems to be odd for file types that don't support transparency but it is needed to decide which color will be used instead of the transparent color. Also it might be that the user needs a solid color instead of transparency.

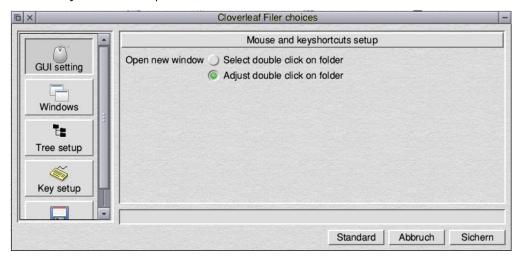


Configuration

Configure !CLFiler you open the !CLFiler menu on the taskbar icon and choose "Choices".

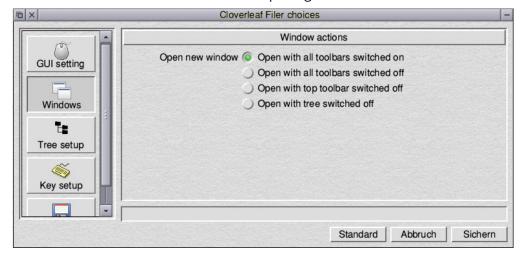
GUI settings

Here you can decide when you want to open an additional window of !CLFiler.



Window setting

Here you can decide what toolbars show be shown when opening the !CLFiler window.

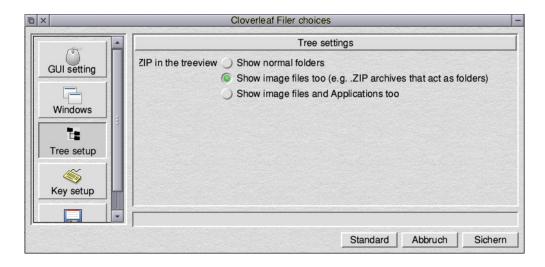


Tree view setup

Here you can choose what items you want to see in the treeview.

Options are:

- Only folders without RISC OS apps (! Pling folders)
- Folders and FS files like SparkFS supported files (Zip, Arc etc.)
- Show all (Folders, FS files and RISC OS apps)



Key setup

At the key set-up you can choose between classic RISC OS key short-cuts and common key short-cuts that are used

by other OS like Windows, MacOS or Linux.

RISC OS Classic

Strg + K: Delete selected item

RISC OS Modern

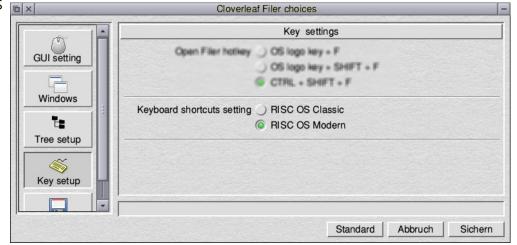
Delete key: Delete selected item

Strg + C: Copy

Strg + X: Cut

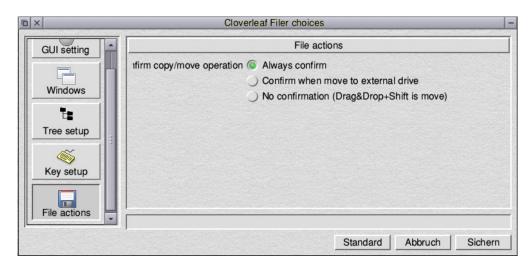
Strg + A: Select all

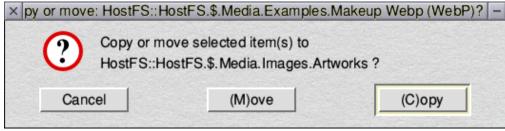
Strg + V: Paste



File actions

Select confirmation settings for copying files.Standard is always confirm if copy or move the file.





Hidden features

!CLFiler startup options in !Run file

You can add some parameters to the command line to run the !CLfiler application inside the !CLFiler.!run. *Example*: <CLFiler\$Dir>.!RunImage 1>

The parameter "1" at the end is needed for the error log output.

- open

to open the window at start-up

If you prefer that !CLFiler opens a window directly on start then you can alter the !CLFiler.!Run file.

Example: <CLFiler\$Dir>.!RunImage -open 1>

- **dir** <*dir*>

to initially open specified directory

Example: <CLFiler\$Dir>.!RunImage -open -dir HostFS::HostFS.\$.1 1>

-toolbars x

to switch on/off toolbars.

Where x is:

- o 3 show all: toolbar, infobar and treeview
- o 2 show toolbar and infobar
- o 1 show the toolbar
- o 0 all toolbars off

Example: <CLFiler\$Dir>.!RunImage -toolbar 2 1>

-debug (Report bugs)

If !CLFiler crashes or displays errors then we need you to send us the log files to investigate. Send two files located in !Boot.Choices.CLFiler as ZIP to our email info@riscoscloverleaf.com The files are "log" and "error-log".

As standard the feature is switched off now to not slow down your RISC OS-

To turn on the debug logging in the !Run replace:

<CLFiler\$Dir>.!RunImage 1><CLFiler\$ChoicesDir>.std-log 2><CLFiler\$ChoicesDir>.error-log by

<CLFiler\$Dir>.!RunImage -debug 1><CLFiler\$ChoicesDir>.std-log 2><CLFiler\$ChoicesDir>.error-log

The !Run file has comments that describe supported options including the -debug option. So you can uncomment the option and save the !Run file and restart the program to activate the debug logging.

Note: In case of problems please turn on -debug first then try to reproduce the problem and send the logs to info@riscoscloverleaf.com. Without debug logging it is hard to investigate what happens.

Jump to file name in the folder (Press first letter of file name)

If your folder incorporates more files than it can show in the window then this feature is handy to jump faster to the desired file. You can jump to the first occurrence of a file name by typing the first letter. Successive pressing of the same letter will jump to the next occurrence of the same letter.

Drag folder to !CLFiler taskbar icon

When you drag a folder from the standard RISC OS filer onto the !CLFIler icon on the taskbar a new window is opened with the folder content.

Add undetected filesystems (FS)

You may add manually some not detected filesystems (FS) or root directories in the

"!Boot.Choices.CLFiler.predefined-roots" text file. Any entries in that file will be added to the drive selector list (if actually present).

This is a workaround for not automatically detected file systems.

The syntax for text file "predefined-roots" is simple. Write every root path, like you see it in the legacy RISC OS IFiler, in a new line, like this:

Fat32fs::SSD_FAT NFS::Ti FAT

Lanman98::Ti_FAT Share::LinuxdriveA IXFS:\$.Harddsic4

Force to use of undetected filesystems text file "predefined-roots"

Add to the run options of CFLiler in !CLFIler.!Run

"-no-search-drives"

This completely disable sthe automatic scan for Filesystems and drives.

and use drives from text file "<CLFiler\$ChoicesDir>.predefined-roots" only.

This will speed up the startup process. Change in the predefined-roots handling. Now all drives from

<CLFiler\$ChoicesDir>.predefined-roots are added without checking if they really exists.

This is solve problems when many drives are mounted and thereby added to iconbar in the startup and scanning process.

Troubleshooting

VirtualRPC: Update WindowManager module (from Mike Hobbs)

These instructions apply to VirtualRPC installations with RISC OS 4.02 where the WindowManager module is not up to date (perhaps because the boot sequence has been broken). In theory, if the boot sequence has not been altered/broken, RISC OS 4.02 should be loading WindowManager 5.84. Installations with RISC OS 4.39 are believed not to need this loading of the new WindowManager module.

You can check the version of WindowManager by opening a TaskWindow and typing help WindowManager If it is not at least 5.15, then the following instructions should be followed.

As a precaution, to avoid corruption of the boot sequence, it would be prudent to make backup copies the components mentioned here. If RISC OS fails to boot correctly, you can use the host operating system to put the backup copies where they came from, review the upgrade steps taken and try again.

Get a copy of the HardDisc4 component from https://www.riscosopen.org/zipfiles/platform/common/HardDisc4.5.28.zip

From it, copy !Boot.Resources.Wimp to your !Boot.Resources (this contains the loader needed to load the new WindowManager)

Get a copy of !System from

https://www.riscosopen.org/zipfiles/platform/common/PlingSystem.zip

Make sure the Wimp module is copied from !System.400.Wimp to the equivalent location on your hard drive. This will be version 5.86 as of March 2024.

Load your HostFS::HardDisc4.\$.!boot.Choices.Boot.PreDesktop into a text editor and find the section with comments about loading the Nested Window Manager. Ensure that this section includes RMEsure commands to load the new WindowManager. It should look something like this (the relevant commands in red):

```
| Load the Window Manager from !System, then ensure that we have all | the necessary sprites etc present. |

If "<BootResources$Path>"="" Then Set BootResources$Path Boot:Resources.

If "<Boot$OSVersion>"="3.50" Then SetMacro Run$Path ,%.,Boot:Library.

If "<Boot$OSVersion>"="3.50" Then Set Boot$OSVersion 350

If "<System$Path>"="" Then Run BootResources:!System

RMEnsure WindowManager 5.15 Set WindowManager$Path

BootResources:Wimp.,Resources:$.Resources.Wimp.

RMEnsure WindowManager 5.15 Run WindowManager:LoadWimp

If Boot$OSVersion < 350 Then RMEnsure DragASprite 0.10 RMLoad System:Modules.DragASprit

If Boot$OSVersion < 350 Then IconSprites BootResources:Wimp.310Spr

|End
```

Finally, reboot VirtualRPC.

Key short-cuts

Navigation

Up/Down - Navigate selection up and down in the current directory Left/Right - Navigate selection left and right in the current directory

ENTER - Run selected file or open directory

SPACE - Selects additional files after the current selected file

- Selects all files between the previous selected file and clicked-on file Shift + Adjust

Ctrl-Up - Go up level (to parent directory) Ctrl-Left - Go backwards (to previous directory) Ctrl-Right - Go forward (reverse go backward)

Ctrl-H - Open parent directory

File operations

Del - Delete selected file(s)

Ctrl-A - Select all in the current directory Ctrl-Z - Clear selection (deselect all)

Ctrl-C - "Copy" file(s) to internal clipboard to "paste" into other directory Shift-C - "Copy As" copy first selected file with new name in the same directory - "Cut" file(s) to internal clipboard to "paste" into other directory Ctrl-X Ctrl-V - "Paste" (copy) the file(s) that was "Copied" or "Cut" before.

- Rename file Ctrl-R Ctrl-S - Set file type

Shift-S - Auto sets the file type by the file extension used by Windows (configuration file: !CLFiler.autofiletypes)

Ctrl-O - Stamp files (set current time stamp as edit date)

- Press first letter of filename or folder Jump to filename

Directories

F11 - Refresh current directory Ctrl-D - Create new directory Ctrl-N

- Open new directory window

- Open new directory window with switched off toolbars CTRL-M

Ctrl-W - Set current directory

Functions

Ctrl-F - Toggle "Search" mode.

F1 - Display help

Display and toolbars

Ctrl-T - Toggle through different display combinations of the top bar, tree view and infobar

Shift-T - Toggle left side tree view F2 - Set "Large icons" view mode F3 - Set "Small icons" view mode - Set "Full info" view mode F4

F5 - Large thumbnails 180 x 180 pixels

Image viewer

'+' - Zoom into the image *'_'* - Zoom out of the image

+ > - Show previous or next image file in directory

CTRL + Mouse wheel - Zoom in and out of the image

- Pan image (only available when image cannot be shown fully inside of the window) Mouse drag

Supported File Image systems

CLFiler can detect following filesytems and connected drives at start:
ADFS, CDFS, DOSFS, FAT32FS, IDEFS, RAM, SATAFS, SCSIFS, SDFS, ShareFS, ADFS4, ATAFS, HDFFS, MASSFS, ZIDEFS

If your filesystem or drive is not detected then look at "Hidden features" page in this manual.

Credits

For support and testing

Raik Fischer

Ashoke Patel

Mike Hobbs

Doug Webb

Bernard Boase

Herbert zur Nedden

Andrew Rawnsley

Third party libraries and modules (open source or freeware)

ConfiX 1.55 by Paul Reuvers, settings tool www.xat.nl

TBX library by Alan Buckley https://sites.google.com/site/alansriscosstuff/tbx

Treeview by Rik Griffin www.github.com/rikgriffin/TreeView

Imagemagicks, editing and manipulating digital images <u>www.imagemagick.org</u>

FFMpeg, record, convert and stream audio and video www.ffmpeg.org

Libjpeg by Thomas G. Lane Libpng by mutliple authors OSLib by Jonathan Coxhead

Inipp by Matthias C.M. Troffaes

Rufl by James Bursa

License files are supplied inside the !CLFiler.license folder.