

## LuraWave - Help

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## Commands of the File Menue

Open

Load a picture from disk

Close

Close the active window

Save

Save content of active window

Quit

Quit **LuraWave**

## Commands of the View Menu

|                  |  |
|------------------|--|
| <u>Symbolbar</u> | Switches the Toolbar on and off<br>Switches the statusbar on and off |
| <u>Statusbar</u> |  |

## Commands of the Window Menu

|                         |  |
|-------------------------|--|
| <u>New</u>              | Creates a new view of the active picture |
| <u>Stacker</u>          | Displays windows in a stacked manner     |
| <u>Tile vertical</u>    | Displays windows in a vertical manner    |
| <u>Tile horizontal</u>  | Displays windows beside each other       |
| <u>Clean up Symbols</u> | Cleans up all symbols                    |
| <u>Window 1, 2, ...</u> | Activate the choosen window              |

## Commands of the Picture Menu

|                 |  |
|-----------------|--|
| <u>Copy</u>     | Copies the frontmost picture to the clipboard    |
| <u>Paste</u>    | Paste content of the clipboard into a new window |
| <u>Zoom in</u>  | Zooms the picture in the frontmost window        |
| <u>Zoom out</u> | Shrink the picture in the frontmost window       |
| <u>Info</u>     | Shows some information about the aktive picture  |


## Commands of the Help Menu

|                |                              |
|----------------|------------------------------|
| <u>Themes</u>  | Shows the help directory     |
| <u>Context</u> | Switches into context help   |
| <u>Info</u>    | Shows up version information |

## Open (File Menu)

Use this command to open a picture within a new window. You can open multiple windows at the same time. You can switch between open pictures by using the Window menu. See [Window 1,2,...](#)

### Shortcut

|           |   |
|-----------|---|
| Toolbar:  |  |
| Keyboard: | STRG+O  |

## The Dialog “File Open”

The following options are available if you like to open a picture.

### Filename

Type a filename or select one out of the list. In the list you will find all pictures of the type specified in “Filetype”

### Filetype

Choose the type of picture you like to open:

- LWF LuraWave Wavelet Format
- BMP\_ Windows / OS2 Bitmap
- PGM\_ Portable Gray-Map
- PPM\_ Portable Pixel-Map
- TIF\_ Tagged Image File Format

### Volumes

Choose a volume from which you like to load the file.

### Directory

Choose the directory from where you like to load the picture.

### Network...

Use this button to connect a network volume to one of your drive-letters.

### Preview

If you have marked this checkbox, you will see a small preview image of the chosen file.

### Options

If you select a file compressed in LuraWave format, you can specify some special option like the loading rate here and version number.

### Info

You can see the size, color depth and file size of the selected file here.

## The Close command (Menu File)

Use this command to close the topmost window


You can use the close symbol also.



## The Save command (Menu File)

Use this command to save the content of the frontmost window. You will get a dialog in which you can choose a format in which the picture should be converted and saved.

### Shortcut

Toolbar:   
Keyboard: STRG+S

## The Dialog “Save”

### Filename

Enter a filename. A extension will be appended by **LuraWave**.

### Volumes

Choose a volume to store the file.

### Directory

Choose a directory to store the file.

### Network...

Choose this button to assign a new volume-letter to a remote volume.

### Options

Choose a option. Options available depend on the choosen filetype:

- **LuraWave Wavelet Format (\*.lwf)**

|             |  |
|-------------|--|
| Version 1.5 | The image will be compressed using the older version 1.5 of the <b>LuraWave</b> software |
| Version 2.0 | The image will be compressed using the new version 2.0 of the <b>LuraWave</b> software.  |
| Lossless    | The picture will be compressed perfect, “lossless”                                       |
| Rate        | The picture will be compressed with the given rate.<br>Los in picture quality may occur. |

- **Windows / OS2 Bitmap (\*.bmp)**

No options

- **Portable Gray- or Pixmap (\*.pgm;\*.ppm)**

|        |  |
|--------|--|
| Binary | Picture will be stored in binary format                            |
| ASCII  | Picture will be stored in ASCII format (Readable by a text editor) |

- **Tagged Image File Format (\*.tif)**

Compression:

|               |  |
|---------------|--|
| non           | Picture is stored uncompressed                                       |
| LZW           | Picture is compressed using the Lempel-Zif-algorithm                 |
| Macintosh RLE | Picture is compressed using Apples “Macintosh RLE” runlength coding. |

## Commands 1, 2, 3, 4 (Menu File)

In this places you can see the names of the last four opened files. You can reopen the file by choosing the appropriate number.



## Command Quit (Menu File)

Choose this command to close all pictures and quit the application. LuraWave will ask you to save unsaved pictures.

### Shortcuts

Mouse: Doubleclick in the upper left corner of the window.




Keyboard: ALT+F4

## Command Cut (Menu Edit)

This command cuts a selected area of a picture out of the frame and places the data into the clipboard. You can use this command only if a area or a whole picture is selected. You can select a area by dragging a frame around it.


### Shortcuts

Toolbar:   
Keyboard: STRG+X

## Command Copy (Menu Edit)

This command will copy the frontmost picture into the clipboard.


### Shortcuts

Toolbar:   
Keyboard: STRG+C

## Command Paste (Menu Edit)

If there is a picture in the clipboard, it is opened in a new window.

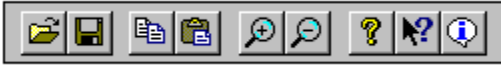
### Shortcuts

Toolbar:   
Keyboard: STRG+V

## Command Symbols (Menu View)

Use this command to switch the Toolbar on and off. If the Toolbar is on, there is a mark in the menu. The Toolbar gives you some buttons for the most common functions like “open”. See a description of all the buttons in the [Toolbar](#).

## Toolbar



To switch the Toolbar on and off, use “Toolbar” from menu “View”. (ALT,A,S).

### Button



### Action

**LuraWave** shows the “Open-dialog” to search for files to open .



**LuraWave** shows the “Save-dialog” to choose some options before saving the frontmost picture.



Copies the frontmost picture into the clipboard.



Create a new window with the contents of the clipboard.



Zoomes in the frontmost window.



Zoomes out the frontmost window



Shows the directory of the **LuraWave**-Help-System.



Switches into the Help-Mode. Click into a button ore window if you like to know what it is for.



Shows the version of **LuraWave for Windows**

## Command Status (Menu View)

Use this command to switch the statusbar on and off. If the statusbar is on, the menu is marked. In the statusbar you can see a shortcut of the function of the button the mouse is over, the actual zoomfactor, the coordinates of the mouse relative to the picture and the color of the pixel below the mouse.

See [Statusbar](#) for a further description.

## Statusbar



The Statusbar is displayed at the lower border of **LuraWave**. You can switch it on and off with “Status” from the “View”-menu.

If you step thru menu by **ARROW-KEY** you will see a short description of the menus function in the left part of the status bar.

If you click onto a button and hold the mouse down, you will see a description of the button. If you do not want to choose a command you have selected, drag the mouse out of the button while the mouse is still down.

On the right side of the status bar you will see the coordinates of the mouse in relation to the picture and the RGB-values of the color below the mouse.



## **Command New Window (Menu Window)**

This command opens a new window and displays the same picture than the actual window. This feature is to view different areas of a picture in detail. If you make changes in one window, this changes will take effect in all the window of that picture.

If you open a new window with this command, it will be shown in front and will get the active window.

## **Command Cascade (Menu Window)**

Use this command to display the open windows in a stacked manner.

## **Command Tile Vertical (Menu Window)**

Use this command to display the open windows in a vertical manner.

## **Command Tile horizontal (Menu Window)**

Use this command to display the open windows in a horizontal manner.

## **Command Clean Up Symbols (Menu Window)**

Use this command to clean up the symbols at the lower border of the LuraWave window. You can create symbols from windows if you click into the “to Symbol”-button.

If the lower part of the LuraWave window is occupied by a window, the symbols will not be visible.

## **Command 1, 2, ... (Menu Window)**

Here you can choose one of the open windows to become the frontmost. The frontmost one is marked.

## **Themes (Menu Help)**

Use this command to get the directory of the Help-system.

## **Command Use Help (Menu Help)**

Use this command to obtain hints for the use of most commands.



## Command Info (Menu Help)

With this command you will get the version of your copy of **LuraWave**.

## Command context help



If you click here, the mouse-arrow changes into a arrow with a question mark. Now you can click into any part of **LURAWAVEs** windows and get help on this part.

### **Shortcut:**

Keyboard: SHIFT+F1

## **Titlebar**

You can find the titlebar at the upper border of LuraWave. It contains the name of the application.

To place the window, you can drag here.

## Scrollbars

If a picture is not completely visible inside ist window, you can pan the picture with this scrollbars.

## **Command Resize (Menu System)**

Here you can resize LURAWAVEs window. You can also resize by dragging the lower right edge of the window.


## **Command Drag (Menu System)**

You can use this command to drag the window on the screen. You can also do that by dragging the titlebar.

## Command Symbol (Menu System)

Use this command to shrink LuraWave into a symbol.


### Shortcut

Mouse: Click into “Minimize”  .  
Keyboard: ALT+F9

## Command Maximize (Menu System)

Use this command to expand the size of LuraWave to the whole screen.

### Shortcut

Mouse: Click into "Maximize"  .

Keyboard: STRG+F10.



## Command Next (Menu Document)

Use this command to activate the next window.

### Shortcut

Keyboard: STRG+F6

## **Command Previous (Menu Document)**

Use this command to activate the previous window.

### **Shortcut**

Keyboard: `SHIFT+STRG+F6`

## Command Close (Menu System)

Closes the active window or dialog.



## **Command recreate (Menu System)**

Use this command to get the application back from a symbol.

## Command Switch To (Menu System)

Use this command to get a list of all active tasks (applications). You can switch to another task or close one.

### Shortcut

Keyboard: STRG+ESC

### The Task-List

Choose a task you like to switch to.

### Switch to

Activates the choosen task.

### Kill task

Closes the choosen task.

### Cancel

Closes the task list.

## Picture

This window displays a picture. You can zoom in, zoom-out, save compressed or uncompressed.

**No help available**

**No help available**



## Formats

- LWF LuraWave Wavelet Format
- BMP Windows / OS2 Bitmap
- PGM Portable Gray Map
- PPM Portable Pixel Map
- TIF Tagged Image File Format

## Rate

Ratio of the filesize of the compressed and the uncompressed picture.

## LWF-Quality

- 15-best possible quality
- 1 best compression ratio

During save, you can set the compression ratio directly.







## **Diskspace**

Shows the amount of free space on the chosen volume.

## Compression of pictures using wavelet transforms

LuraWave uses algorithms based on wavelet transforms.

This system has a lot of advantages compared to other algorithms:

- wide range of compression ratios from lossless to very high rates (1 : 1000, lossy).
- better quality with same filesize in comparison to JPEG
-  exact defined compression ratio and file sizes
-  progressive load of data
-  compression with quality enhanced regions
-  quality based password protection of images
-  Netscape-Plug In available
-  PhotoShop-Plug In available



Any LWF-Tool can decompress a protected image up to the free quality, which is specified before compression. For further improvement of the image the user has to give the correct password. In internet image databases this can be done automatically via CGI.

During compression the user can specify regions, which will be compressed with higher priority, i.e. with a better quality. When the image is transferred over a network these regions will appear first in the data stream. So they will become visible earlier, when the image is reconstructed progressively. You can try this with the LuraWave Netscape Plug In (<http://www.luratech.de>)

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## What is LuraWave

**LuraWave** will show the performance of a new, high power compression algorithms for data compression in comparison to other popular compression schemes.

**LuraWave** includes algorithms for picture compression and decompression in lossless and lossy modes. Compression ratios range from 1:1,5 to 1:5 in lossless mode to 1:1000 in lossy mode. Zoom and statistical functions are includes to allow easy comparison.

**LuraWave** is able to handle the following formats:

-  LWF LuraWave Wavelet Format
-  BMP Windows / OS2 Bitmap
-  PGM Portable Gray-Map
-  PPM Portable Pixel-Map
-  TIF Tagged Image File Format


Further formats will follow in later version.



## Command Zoom In (Menu Picture)

Use this command to zoom into the frontmost picture.

### Shortcut

Toolbar:   
Keyboard: GREY +

## Command Zoom Out (Menu Picture)

Use this command to zoom out of the frontmost picture.

### Shortcut

Toolbar:   
Keyboard: GREY -

## **Commad Info (Menu Picture)**

Use this command to obtain som information about the frontmost window.

## Preview

[Click here to switch preview mode on and off.](#)

## **HIDC\_RADIO\_PXM\_BINARY**

Click [here](#) to switch preview mode on and off.

## **HIDC\_SPIN\_LWF\_LEVEL**

[Click here to switch preview mode on and off.](#)

## Compression of pictures

You can compress pictures by choosing “Save” from the File-Menu and select the **LuraWave-Format (\*.lwf)** to store the picture.



## Decompression of pictures

You decompress pictures by opening a file stored in **LuraWave-Format (\*.lwf)** Decompression is done automatically.

You can store the picture uncompressed by using a other file format during save.



