



# Directory List & Print (Pro)

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**Directory List & Print** is a software tool for Windows™ and enables listing and printing the content of any directory in a simplest way. In addition, the file lists can be formatted, filtered, saved to several file formats and also be further processed (delete/copy/move files). By copying to the clipboard the lists can be exported into other programs or opened directly in Word™ and Excel™ if Microsoft Office™ is installed, respectively in Writer and Calc if OpenOffice / LibreOffice installed (and other closely related applications).

The Free Version (Freeware) has all the basic features included, the Pro Version (Shareware) provides many interesting additional features (see below).

## Installation

Start the setup program and follow the instructions. Afterwards an entry in the start menu and a program shortcut on the desktop is available to start the program.

Both the setup program and the program itself are digitally signed. Before starting please check the **validity of the Digital Signature** of the executable EXE-files (context menu: Properties: Digital Signatures: open Infonautics GmbH). If the signature is invalid or missing then the program has been altered by third parties and may thereby cause harm. In this case please refer to the software manufacturer for the original software (see contact below).

## Pro-License

Some of the features in the Pro Version are not free and set inactive in the freeware version. They can be activated online for a small fee at:

<https://www.infonautics-software.ch/directorylistprint/buy>

The Pro license is valid for an unlimited time and all future updates.

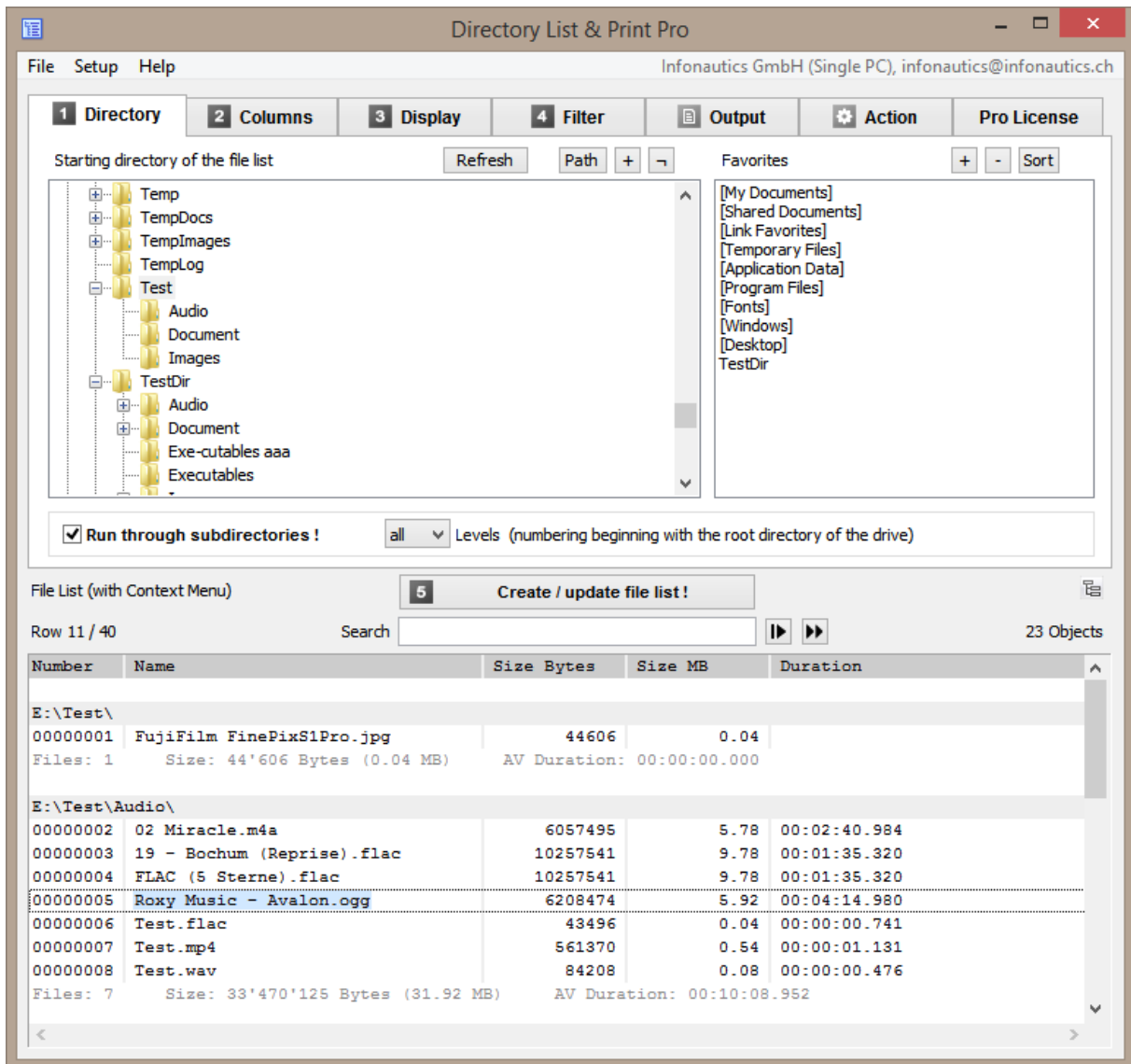
## System Requirements

Microsoft Windows™ 7/8/10 (32bit and 64bit).  
Program space on hard disk: about 20 MB.

## User Interface

The program supports the creation and processing of the directory listings in a few easy steps:

1. **Directory** selection for the starting point of the list.
2. **Columns** selection for the definition of the list.
3. **Display** details for refinement of the list.
4. **Filter** of optional requested files.
5. **Create/Update** to start producing the file list.
6. **Output** of the file list for printing and saving to:  
Pdf, Html, Word™, Excel™, Writer, Calc, Xml, Csv, Text, Clipboard, Notepad
7. **Action** for processing the listed files (delete, copy, move etc.).



The screenshot shows the 'Columns' tab of the Directory List & Print Pro application. The interface is divided into several sections:

- Column Selection:** A list of columns is shown on the left, categorized into 'BASIC FILE INFORMATION' and 'ADDITIONAL FILE INFORMATION'. A central arrow points to a list of 'Selected columns to be displayed' on the right, which includes Row Number, Name of file, Size Bytes, Size MB, and File Content Duration.
- Display Options:** Below the column selection, there are radio buttons for 'Show as a list of files within directories' (selected) and 'Show as a table of directory totals only'. The 'List files within each directory' option is checked. There are also checkboxes for 'List subdirectories', 'Remove path intertitle', and 'Remove file type from column Name'. For the table view, there are options to suppress path, additional information, and empty directories, along with a field for indentation characters (set to 3).
- Formatting Options:** On the right side, there are dropdown menus for alternate date format (dd.mm.yyyy), time format (hh:mm:ss), and duration format (hh:mm:ss.nnn). There are also checkboxes for 'Use alternate date format', 'Use alternate time format', and 'Use alternate duration format'. A 'File name NATURAL' dropdown and a 'descending' checkbox are also present.
- File List:** At the bottom, a table displays the file list. The table has columns for Number, Name, Size Bytes, Size MB, and Duration. The current view shows a directory structure with files and subdirectories.

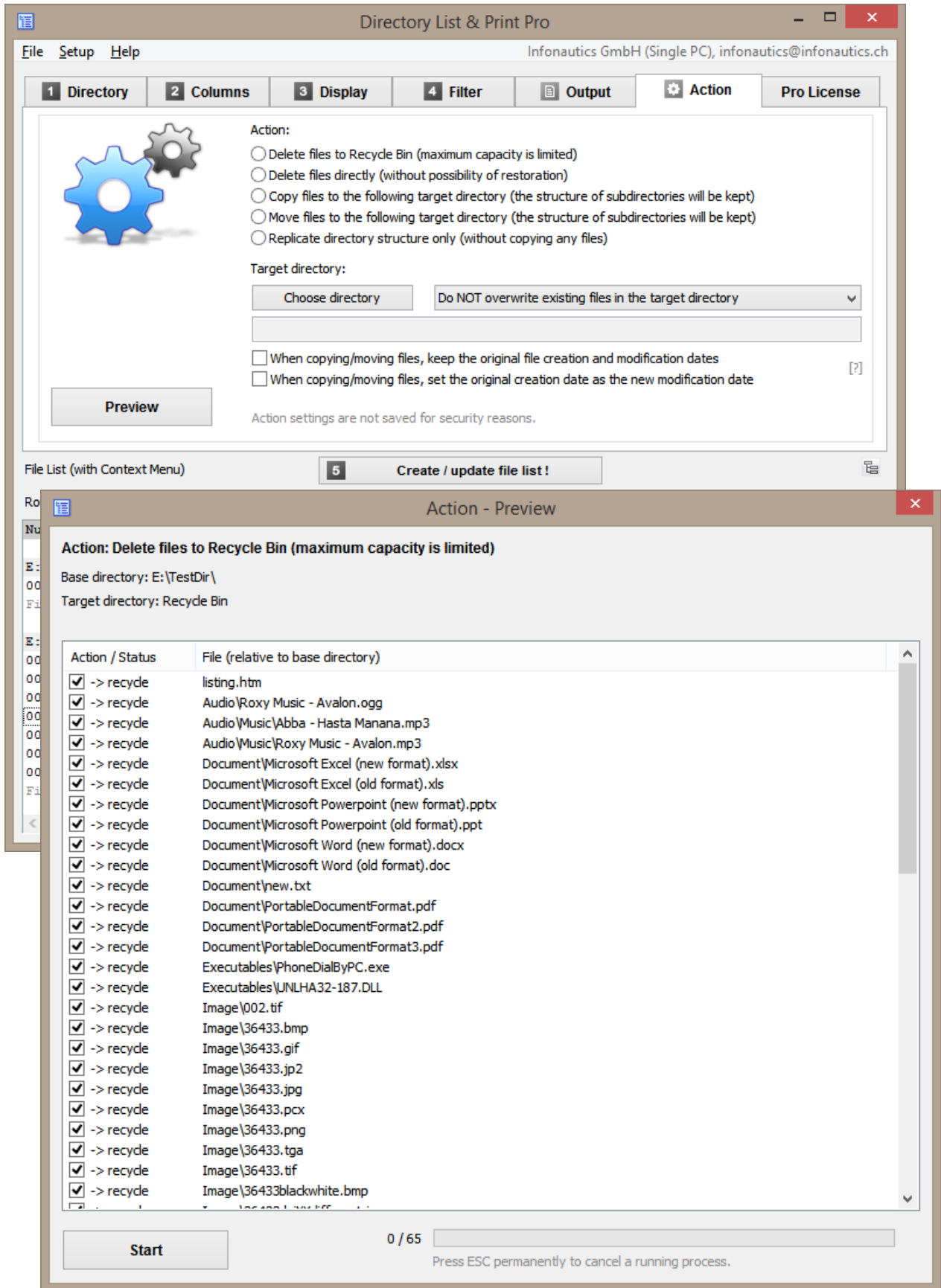
Number	Name	Size Bytes	Size MB	Duration
E:\Test\				
00000001	FujiFilm FinePixS1Pro.jpg	44606	0.04	
Files: 1    Size: 44'606 Bytes (0.04 MB)    AV Duration: 00:00:00.000				
E:\Test\Audio\				
00000002	02 Miracle.m4a	6057495	5.78	00:02:40.984
00000003	19 - Bochum (Reprise).flac	10257541	9.78	00:01:35.320
00000004	FLAC (5 Sterne).flac	10257541	9.78	00:01:35.320
00000005	Roxy Music - Avalon.ogg	6208474	5.92	00:04:14.980
00000006	Test.flac	43496	0.04	00:00:00.741
00000007	Test.mp4	561370	0.54	00:00:01.131
00000008	Test.wav	84208	0.08	00:00:00.476
Files: 7    Size: 33'470'125 Bytes (31.92 MB)    AV Duration: 00:10:08.952				

The screenshot displays the 'Directory List & Print Pro' application window. The interface is divided into several sections:

- Filter Section (4 Filter):** Contains three main filter groups:
  - Filter names of files/directories:** Includes options for 'include' (selected) or 'exclude', a filetypes list (txt, doc, xls), and a terms list (Monday, 12345, John).
  - Filter files by date:** Includes options for 'include' (selected) or 'exclude', and a choice of date criteria: 'created' (selected), 'modified', or 'accessed (last access)'. It features 'From' and 'To' date and time pickers.
  - Filter files by attributes:** Includes options for 'include' or 'exclude', and a choice of relevant attributes: 'irrelevant', 'set' (checked), or 'not set'. It lists various attributes like Archive, Read only, Hidden, System, Compressed, Encrypted, Temporary, Sparse File, Reparse Point, and Offline.
- Output Section (5 Output):** Shows icons for printer, folder, spreadsheet, word document, and file. It includes buttons for 'Print to Printer', 'Print to PDF', 'Copy to Editor', and 'Copy to Clipboard'. There are also options for 'Align column with blanks', 'Use ; instead of TAB', and 'Edit my style' (Use my style, Thumbnails, Hyperlinking, For WWW).
- File List (with Context Menu):** A table showing a list of files and folders. The current view shows 23 objects. The selected file is 'Roxy Music - Avalon.ogg'.

**File List (with Context Menu) Data:**

Number	Name	Size Bytes	Size MB	Duration
<b>E:\Test\</b>				
00000001	FujiFilm FinePixS1Pro.jpg	44606	0.04	
Files: 1    Size: 44'606 Bytes (0.04 MB)    AV Duration: 00:00:00.000				
<b>E:\Test\Audio\</b>				
00000002	02 Miracle.m4a	6057495	5.78	00:02:40.984
00000003	19 - Bochum (Reprise).flac	10257541	9.78	00:01:35.320
00000004	FLAC (5 Sterne).flac	10257541	9.78	00:01:35.320
00000005	<b>Roxy Music - Avalon.ogg</b>	6208474	5.92	00:04:14.980
00000006	Test.flac	43496	0.04	00:00:00.741
00000007	Test.mp4	561370	0.54	00:00:01.131
00000008	Test.wav	84208	0.08	00:00:00.476
Files: 7    Size: 33'470'125 Bytes (31.92 MB)    AV Duration: 00:10:08.952				

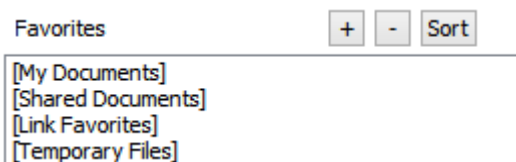


## Features

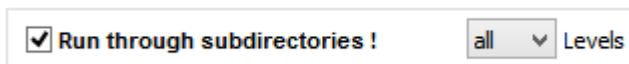
**Free Version (Freeware)** and **Pro Version (Shareware)** additionally:

### Directory selection [1. Directory]

- Selection of directories to be listed by a tree structure.
- Listing of sub-directories and/or files with recursion (Run through subdirectories).
- Selection of directories by entering the path as a text string.
- Drag & Drop of directories (or files) from Windows Explorer to set a new directory.
- Direct selection of important system directories like "My Documents", "Shared Documents", "Favorites", "Temporary Files", "Application Data" etc.
- Save own directory favorites.



- Set directory recursion depth for subdirectories.



### File information [2. Columns]

- Display of **BASIC FILE INFORMATION**:  
 row number (consecutive or recurring for each subdirectory),  
 file and directory name with or without directory path,  
 file name with or without file extensions,  
 date and time of last modification (back to the year 1601),  
 date and time of creation (back to the year 1601),  
 date and time of last access (if tracked by the operating system),  
 file size (Byte, KiloByte, MegaByte, GigaByte).
- Display of **ADDITIONAL FILE INFORMATION**:  
 File size effectively on disk (Byte, KiloByte).  
 Verification of the file type based on the file signature of the content. Display of the file type confirmed by the signature, alternatively suspected file types.  
 Display of confirmed and suspected file types in plain text.  
 File attributes (Archive, Read Only, Hidden, System, Compressed, Encrypted, Temporary, Sparse File, Reparse Point / Symbolic Link, Offline, Index).  
 Length of file names and file paths.  
 Calculated checksums for files: CRC32, MD5, SHA1.  
 Owner of files and directories.  
 File access rights for current user (or administrator if the program was started with administrator rights).  
 Title of document files (PDF, HTML, MS-Office, Open-Office, Libre-Office etc.).  
 Title of audio/video files (mp3,ogg,mpeg,mp4 and many more, see website).  
 Title of program and version number of executables (exe,dll).  
 Dimension of documents like pages, words, characters.

Dimension of images like width, height, bit depth.

Dimension of audio files like sampling rate, bit rate, bit rate mode.

Dimension of video files like width, height, frame rate, bit rate.

Format of audio/video and image files.

Duration of audio/video files.

- Display of **WINDOWS FILE PROPERTIES** (according to Windows Explorer):  
title, subtitle, subject, rating, tags, categories, comments, authors, date taken, date acquired, copyright, program name, artists, composers, album, genre, year, track, length, pages, slides, word count, content created, date last saved, link targets of shortcuts, etc. (full list on the website).
  - Display of **DOCUMENT meta tags** for document files:  
title, subject, keywords, categories, comments, author, pages, sheets, slides, words, characters, lines, date created, time created, date modified, time modified, modified by, revision, encryption, software, version, email from, email to, email subject, email date, etc. (full list on the website).
  - Display of **EXIF meta tags** for image files:  
width, height, depth, resolution Dpi, format, orientation, date and time taken, date and time changed, author/artist, copyright, description (title), comment, XP-comment, XP-title, XP-subject, XP-keywords, XP-author, rating, software, camera model, focal length, aperture f-stop, exposure time, sensitivity ISO, color space etc. (full list on the website).
- GPS position data** (if available): time stamp, altitude relating to sea level, latitude (as decimal degrees or formatted as degrees / minutes / seconds), longitude (as decimal degrees or formatted as degrees / minutes / seconds), Google Maps link (customizable) based on the GPS position data.
- Display of **IPTC meta tags** for image files:  
keywords, headline, caption, copyright, byline, date created, time created, country, state, city, sub-location, source, editor, instructions, etc. (full list on the website).
  - Display of **XMP meta tags** for image files (especially Adobe):  
title, description, creator, source, writer, date created, time created, date modified, time modified, format, preserved file name etc. (full list on the website).
  - Display of **AUDIO meta tags** for audio files:  
title, artist, album artist, album, year recorded, year released, track number, disc number, genre, composer, publisher, copyright, comment, rating, length, beats per minute, sampling rate, bit rate, bit rate mode, bit depth, format, channels etc. (full list on the website).
  - Display of **VIDEO meta tags** for video files:  
title, date encoded, year recorded, year released, length, width, height, video format, video standard, frame rate, bit rate, genre, movie name, series name, series season, director, producer, publisher, artists, subject, description, keywords, copyright, comment, rating, law rating, application software, audio channels (count), audio tracks (language, room-position, audio-format, sampling-rate, bit-depth, bit-rate), subtitle tracks (language, format), etc. (full list on the website).

*(The retrieval of additional information and meta tags from the files takes more time than the provision of basic information.)*

### Display settings [3. Display]

- Sort files/directories by name in NATURAL order (like Windows Explorer).
- Display of column titles in the first row, turn on/off.
- Display of inter-titles (directory path), turn on/off.
  
- Show number and sum of size and duration of the displayed objects.
- Hide directories without content to be displayed.
  
- Display a table showing only the directories without details for the contained files. The size, number of folders and number of files are displayed per single directory and cumulated over all its subdirectories. The subdirectories can be indented in the directory structure by any number of spaces. Also there can be listed directory names only without paths and other details.
  
- Display of the date in many different international formats:  
dd.mm.yyyy, dd/mm/yyyy, dd-mm-yyyy, yyyymmdd, yyyy.mm.dd, yyyy/mm/dd,  
yyyy-mm-dd, mm.dd.yyyy, mm/dd/yyyy, mm-dd-yyyy
- Display of the time in many different international formats:  
hh:mm:ss, hh:mm, hh:mm:ss AM/PM, hh:mm AM/PM, hhmmss, hhmm
- Display of the audio/video duration in many different formats:  
HH:MM:SS.nnn, MM:SS.nnn, SS.nnn, HH:MM:SS, MM:SS, SS
  
- Sort files/directories by name in NATURAL order (like Windows Explorer).
- Sort files/directories by name in ASCII order, ascending/descending.
- Sort files by date/time, size, duration (A/V), ascending/descending.

### Filter for file selection [4. Filter]

- Set filter to include or exclude certain file types (wildcards placeholder ? and \* available).
- Set filter to include or exclude files and directories by certain terms (connectable by AND or OR, wildcards placeholder ? and \* available, searching in filenames and/or paths).
- Set filter to include or exclude files by date range, date created or modified.
- Set filter to include or exclude files by attributes (Archive, Read Only, Hidden, System, Compressed, Encrypted, Temporary, Sparse, Reparse Point / SymLink, Offline, Index).
- Set filter on audio/video/image properties (Width, Height, BitDepth, Resolution Dpl, FrameRate FpS, BitRate KBpS, SamplingRate KHz, Duration in Seconds).
- Set filter on length of filenames, eg. to analyze the file system when copying it to a new directory structure (path+filename, filename only, >, =, <).



## Output of the file list [Output]

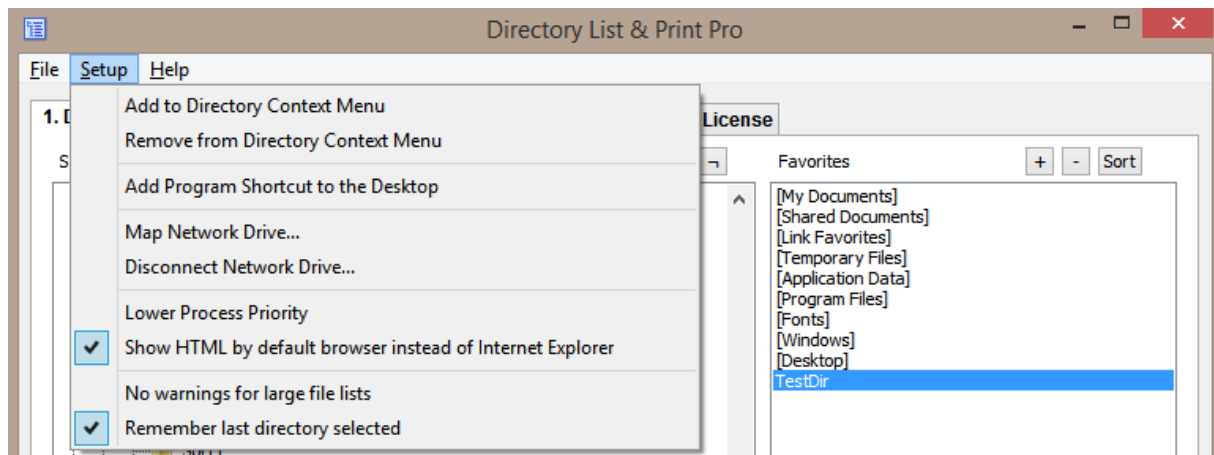
- Direct printing of the file list.
- Export list into other programs by copying to the clipboard. The corresponding data will be organized in columns separated by tabs so that the list can be pasted directly into other programs.
- Open the list directly in Microsoft Word™ and Excel™.
- Open the list directly in Writer and Calc of OpenOffice / LibreOffice (and other closely related applications).
  
- Output the list directly to the default printer.
- Output the list as PDF file, page size is adjusted automatically up to A0.
- Output the list to Notepad editor and clipboard with column adjustment with blanks and freely selectable field separator.
- Output the list as HTML table, font and color is customizable, files and folders can be linked either absolute or relative (for WWW), creation of thumbnails (preview images) for file types JPG, PNG, GIF, TIF, BMP.
- Output the list as tab- or semicolon-delimited TXT file.
- Output the list as comma- or semicolon-delimited CSV file.
- Output the list as XML file, including all selected attributes.
- Output the list as XLS file in "Excel XML Spreadsheet 2003" format (also available without installed Excel), which can be opened by Excel and Calc.
- Output the list as XLSX file in "Excel XLSX Workbook 2007-2019" format (also available without installed Excel), which can be opened by Excel and Calc.
- Open the list directly in Microsoft Word™ and Excel™.  
(Output to a file is faster than direct opening in the application.)
- Open the list directly OpenOffice / LibreOffice Writer and Calc.
- Linking of files and directories in HTML, Excel™ and Calc for direct open by mouse click. Also available in XLS/XLSX Excel file output. (Caution: Excel cannot handle the # character in filenames because it is internally used as a reference to other tables.)
- Creation of thumbnails (preview images) for file types JPG, PNG, GIF, TIF, BMP if outputting to HTML, Excel™ and Calc. Also available in XLSX file output.  
(Excel and Calc manage up to 3000 thumbnails in a spreadsheet while Internet-Explorer, Firefox and Chrome browsers can handle about 20,000 thumbnails in a HTML file. All thumbnails are embedded in a single file and are rotated according to available Exif information.)

## Actions with files [Action]

- Action, further processing of the files in the file list with a preview of the intended processing.
- Listed files can be deleted, moved to the Recycle Bin, copied and moved to another destination directory. The directory structure will be taken over in the destination directory.
- Already existing files in the target directory can be overwritten or not.
- Possibility to keep the original creation date when copying and moving files, instead of setting it to the time of copying by Windows default. Also takeover directory time stamps.
- Possibility to transfer the original creation date to the modification date of the target files when copying or moving the files (Unix derivatives and corresponding devices partly do not support a creation date, but only a modification date).
- Possibility to replicate the directory structure only (without copying any files).

## Program settings [Menu: Setup]

- Automatic saving of settings when exiting the program.
- Start program with a directory path as a parameter to show directly that directory:  
"C:\Program Files\DirectoryListPrint.exe" "C:\MyDirectory"
- Integration of "Directory List & Print" in the context menu of directories to list any directory directly from within Windows Explorer with "Open in Directory List & Print".
- Automatic set up of a program shortcut on the desktop.
- Support for connecting and disconnecting network drives.
- Display of HTML output with the Internet Explorer or another default browser.
- Remember last used directory or discard it.

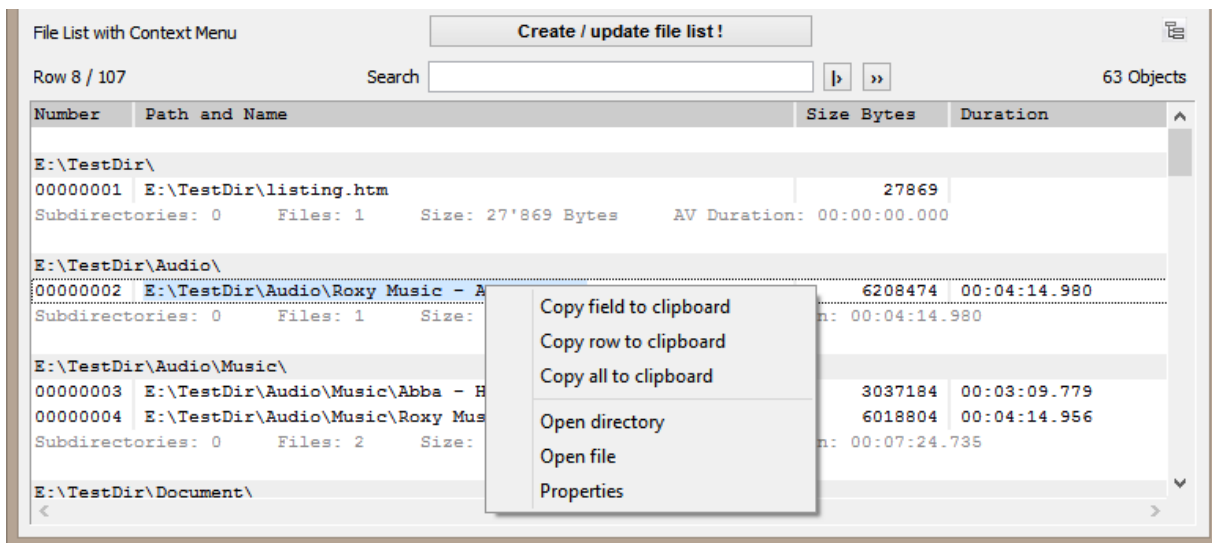


## Program update [Menu: Help / Check for program update]

- Automatic updating of the program to the latest version (the connection to the Internet is established only when selecting the menu item).

## Functions built-in the file list [Search field and context menu]

- Search: Find a string in the file list using the search modes "Search from the beginning" and "Continue searching from the current row".
- Double-clicking the directory subtitle opens the directory.
- Double-clicking the line of a file opens the corresponding file.
- Double-clicking a link opens the link in the browser (e.g. Google Maps).
- Context menu: Copy selected field or row to clipboard, copy complete file list to clipboard, open the directory containing the selected object, open/start the selected object, show properties of the selected file or directory.



## Save and load configuration settings [Menu: File]

All current settings can be stored in one or more configuration files with the file extension ".dlp". They can be reloaded as needed to reproduce the so-saved settings. The settings in the menu "Setup" are not stored in configuration files.

The last 8 configuration files used are kept in a list.

If necessary, the current settings can be reset to the basic program settings.

Configuration files can also be loaded by drag & drop on the window of Directory List & Print. Even if the loaded configuration file includes a startup directory, the creation of the list is not automatically started immediately.

## Control program using startup parameters [for scripting]

Specify a configuration file to set up immediately the appropriate settings at startup (if the settings include saving the last used directory, then this is also set):

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp"
```

Specify a particular home directory as a starting point for generating the list and start with the creation immediately after startup:

```
DirectoryListPrintPro "E:\MyDirectory"
```

Specifying both a particular configuration as well as a home directory and start with the creation of the list immediately after startup:

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"
```

### In addition automatically create a specific output (file)

This being the case the program execution is minimized in the taskbar showing the program icon only and the program is closed automatically at the end. An already existing output file is overwritten without warning. If no configuration file is specified, then the last settings used in the program are applied.

Create a list with the appropriate configuration and copy it to the clipboard:

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory" "output,clipboard"
```

Create a list with the appropriate configuration and open it in the Notepad editor:

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory" "output,notepad"
```

Create a list with the appropriate configuration and print it on the default printer:

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory" "output,defaultprinter"
```

Create a list and save it as a PDF file:

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,pdf,D:\OutputDirectory\MyList.pdf"
```

Create a list and save it as a HTML file:

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,html,D:\OutputDirectory\MyList.htm"
```

Create a list and save it as a WORD file (MS Office installed):

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,word,D:\OutputDirectory\MyList.doc(x)"
```

Create a list and save it as a EXCEL file (MS Office installed):

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,excel,D:\OutputDirectory\MyList.xls(x)"
```

Create a list and save it as a WRITER file (Libre/OpenOffice installed):

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,writer,D:\OutputDirectory\MyList.odt"
```

Create a list and save it as a CALC file (Libre/OpenOffice installed):

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,calc,D:\OutputDirectory\MyList.ods"
```

Create a list and save it as a TEXT file, with tabulator as column delimiter:

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,text,D:\OutputDirectory\MyList.txt"
```

Create a list and save it as a TEXT file, with semicolon as column delimiter:

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,textsemi,D:\AusgabeVerzeichnis\MeineListe.txt"
```

Create a list and save it as a CSV file, with semicolon as column delimiter:

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,csv,D:\OutputDirectory\MyList.csv"
```

Create a list and save it as a CSV file, with comma as column delimiter:

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,csvcomma,D:\OutputDirectory\MyList.csv"
```

Create a list and save it as a XML file:

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,xml,D:\OutputDirectory\MyList.xml"
```

### Create Excel files without having MS Office installed

Create a list and save it as a XLS file in the format "Excel XML Spreadsheet 2003":

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,xls,D:\OutputDirectory\MyList.xls"
```

The XLS file in "Excel XML Spreadsheet 2003" format can be opened by Microsoft EXCEL from version 2003 and OpenOffice / LibreOffice CALC (including file linking when specified in the configuration).

Create a list and save it as a XLSX file in the format "Excel XLSX Workbook 2007-2019":

```
DirectoryListPrintPro "E:\MyDocuments\Configuration1.dlp" "E:\MyDirectory"  
"output,xlsx,D:\OutputDirectory\MyList.xlsx"
```

The XLSX file in "Excel XLSX Workbook 2007-2019" format can be opened by Microsoft EXCEL from version 2007 and OpenOffice / LibreOffice CALC (including file linking and thumbnail images if specified in the configuration).

**Supported file formats for additional information** (full list on the website)

**All files** supporting extended information like Date/Time created, Date/Time modified, File size, File attributes, File type, File path, File name, Checksums CRC32 / MD5 / SHA1.

**Image files** supporting additional information like Image format, Image size, Bit depth, Resolution Dpi, EXIF meta tags if available, IPTC meta tags if available:

- *bmp, dib, png, gif, jpg, jpeg, jpeg2000, jp2, j2k, j2c, jng, jif, jpe, tiff, tif, tga, targa, ico, pcd, pcx, cut, dds, exr, g3, hdr, lbm, koa, mng, pbm, pfm, pgm, pct, pic, pict, ppm, ras, raw, nef, nrw, dng, crw, cr2, raf, orf, erf, arw, rw2, pef, srw, mrw, sgi, wbmp, xbm, xpm, psd*

**Audio files** supporting additional information like Title, Duration, Audio format, Sampling rate KHz, Bitrate Kbps, Fixed/variable bitrate, AUDIO meta tags if available:

- *ogg, ogm, wav, mp2, mp3, wma, ra, ape, mac, flac, aiff, aifc, au, iff, paf, sd2, irca, w64, mat, pvf, xi, sds, avr, ac3, aac, dts, m4a, m4b, cda, dsf*

**Video files** supporting additional information like Title, Duration, Video format, Picture size, Frame rate Fps, Bitrate Kbps, VIDEO meta tags if available:

- *avi, mpeg, mpg, vob, mp4, mpgv, mpv, m1v, m2v, m4v, asf, wmv, qt, mov, rm, rmvb,ifo, wtv, dvr-ms, mkv, mka, mks, divx, xvid, m2ts, m2t, mts, ts, flv, 3gp, mxfl, swf*

**Document files** supporting additional information like Title, Extent like pages/sheets/slides and number of words/characters, DOCUMENT meta tags if available:

- *pdf, doc, docx, docm, dotx, dotm, xls, xlsx, xlsxm, xltx, xltm, ppt, pptx, pptm, potx, potm, odt, ods, odp, odg, odc, odf, odi, odm, htm, html, eml und msg (Emails)*

**Executable files** supporting additional information like Title, Version number:

- *exe, dll*

**Shortcuts** that support the display and linking of link targets:

- *url, lnk*

## **Contact**

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Eichholzweg 16  
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Switzerland

Internet: <https://www.infonautics-software.ch/directorylistprint>  
E-Mail: [support@infonautics.ch](mailto:support@infonautics.ch)

## **Acknowledgement**

This software uses MediaInfo library copyrighted by MediaArea.net SARL.

This software uses FreeImage open source library under FreeImage Public License.

This software uses free ExifTool Perl library developed by Phil Harvey.