AllDup Manual

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AllDup

Find and remove duplicate files

AllDup is professional software for finding duplicate files on your hard drives. The search for file duplicates can be carried out using various file properties such as file name, file extension, size or content. You can also use AllDup to find similar pictures, similar file names or similar music files. The found duplicate files can be deleted, copied, moved or renamed using the File Manager. A variety of program options allow you to search for duplicate files exactly according to your needs. AllDup is **Freeware** and can be used free of charge by private users and companies.

AllDup Features

- Search for duplicates of executable and any other files
- Find similar files
- Search inside archives with the following files extensions: 7Z, ARJ, CAB, CB7, CBR, CBT, CBZ, EPUB, GZ, ISO, LZH, LHA, NRG, RAR, TAR, ZIP
- Ignore the ID3 tags of MP3 files
- For your safety all files that have to be deleted can be moved to the Recycle Bin
- Search for duplicates of music and video files
- Find duplicate files with a combination of the following criteria: file content, file name, file extension, file dates or file attributes!
- Ignore the metadata of FLAC files
- Delete duplicates files and create hard links
- Convenient search result list with all duplicate files
- Fast search algorithm
- Find video & music files with the same or almost same audio length

- Search is performed in multiple specified folders, drives, media storages, CD/DVDs, ...
- The file duplicates can be copied or moved to a folder of your choice
- The built-in file viewer allows you to preview many different file formats and analyze the content of the file before deciding what to do with it
- Find duplicate pictures
- For your safety all files that have to be deleted can be moved in backup folder
- Entire folders or individual files can be excluded from the search by masks or size conditions
- Search for files with similar names
- Export the search result to a text file, CSV file or an Excel file
- Many flexible commands help you to select unnecessary duplicates automatically
- Detailed log file about all actions
- Save and restore the search result to continue working later
- Create shortcuts or hard links to the last original file
- Search for duplicates of digital photo files
- Search for similar pictures
- List non-duplicate files
- Search for hard links
- Ignore the EXIF data of JPEG and CR2 files
- The unnecessary duplicates can be deleted permanently

What AllDup can do for you?

- Remove duplicate files - as you want!
- Finding out whether a file has hard links!
- Find and delete duplicate files!
- Find and remove duplicate files of ANY type!
- Find and create hard links of your duplicate files!
- Find and remove duplicate files from your computer, notebook, network drives, flash drives, memory drives!
- AllDup is a powerful tool to search for file duplicates on your computer!
- Find duplicate MP3 files with different ID3 Tags!
- Free up used hard disk space on your PC!
- Find similar pictures

- Clear your computer, music or photo collection from duplicate files!
- Find similar music files
- Remove duplicate files faster and safer than with any other duplicate file finder!
- Find, remove, delete, copy or move duplicate files!
- Remove duplicate files - Easily and Anywhere!
- Find and delete hard links
- Find duplicate pictures
- Find and remove duplicate files!
- AllDup helps you to find, view and remove files that have duplicate content, regardless of name!
- Find duplicate photos
- Find files with similar names
- It can be especially useful if you have large Music, Pictures, Downloads or Documents folders!
- Delete duplicate music files!
- No more file clones or file duplicates!
- Remove duplicate photos and images!

AllDup Requirements

Operating System

AllDup is compatible with all versions of the following operating systems (32/64-bit):

Microsoft Windows Workstation

- Microsoft Windows 11
- Microsoft Windows 10
- Microsoft Windows 8
- Microsoft Windows 7

Microsoft Windows Server

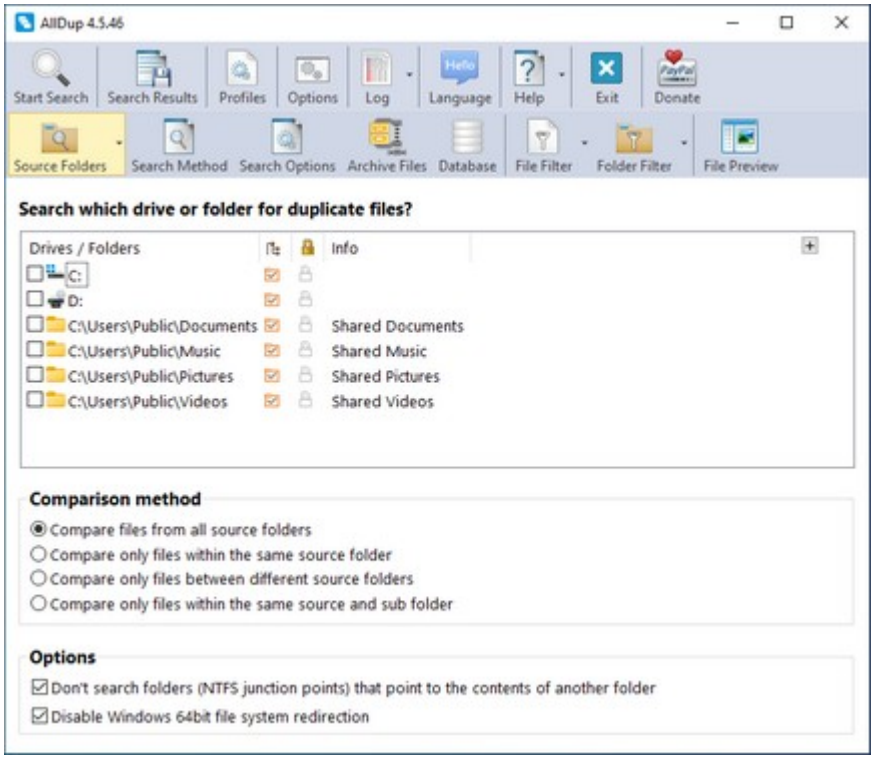
- Microsoft Windows Server 2022
- Microsoft Windows Server 2019
- Microsoft Windows Server 2016
- Microsoft Windows Server 2012
- Microsoft Windows Server 2008 R2

Important Note

Deleting, moving or renaming files can prevent Windows or programs from starting. You should only delete, move or rename files if you are absolutely sure that they are not required for the operation of Windows or other programs.

Please understand that we cannot give you any individual assistance with questions about which files may be deleted.

AllDup Main Window



Toolbars

Top toolbar

- Start search

  This starts the search for duplicate files.

- Search Results

  All saved search results are listed here.

- Profiles

  All saved profiles are listed here.

- Options

  Here you can configure various program options.

- Log

  The log of the last search is displayed here.

- Language

  Here you can change the language of the user interface or start a new translation of the user interface.

- Help

  With this you can open the help file, the Internet update or the AllDup about window.

- Exit

  With this you can exit AllDup.
- Donate

  This opens the AllDup donation page on the internet.

Bottom Toolbar

- Source Folders

  Here is the list of source folders that will be searched for duplicate files.
- Search Method

  The search method is specified here.
- Search Options

  Various search options can be specified here.
- Archive Files

  Here you can specify whether archive files should be searched for duplicate files.
- Database

  Here you can specify whether checksums should be saved in a database.
- File Filter

  With the File filter you can exclude specific files from the search.
- Folder Filter

  With the folder filter you can exclude certain folders from the search.
- File Preview

  Here you can specify which plugin should be used to display a file in the search result in the file preview.

Source Folders

Source Folder List

In the source folder list, you can specify which drives and folders to scan for duplicate files. You enable a source folder for searching by checking the box in front of the folder path.

Exclude Subfolders

If you clear the checkbox in the 'Search all subfolders' column for a source folder, then all subfolders in this source folder will be excluded from the search.

File Protection

If you activate the checkbox in the 'File protection' column for a source folder, then AllDup cannot delete, move or rename any files within this source folder. File protection can be changed later, if necessary, in the search result using the File protection menu item in the menu bar.

Add new source folder

You can add a new folder to the source folder list by clicking the 'Source Folder' button in the toolbar, by right-clicking in the source folder list, by clicking the '+' button in the top right corner of the source folder list or drag and drop a folder from Windows Explorer into the source folder list.

Edit source folder

If you right-click on a source folder, you will see a menu with various commands, such as 'Edit', 'Delete', 'Open', ...

Comparison Methods

- Compare files from all source folders

  With this comparison method, the files from all source folders are compared with each other.

- Compare only files within the same source folder

  This comparison method does not compare files that are in different source folders.

  Example:

1. Source Folder: C:\Data
2. Source Folder: D:\Server

Files:

1. C:\Data\Work\info.txt
2. C:\Data\Home\info.txt
3. D:\Server\Work\info.txt
4. D:\Server\Home\info.txt

A comparison between the files from the two source folders does not take place. Only files 1 & 2 and 3 & 4 are compared.

- Compare only files between different source folders

  This comparison method does not compare files that are in the same source folder.

  Example:

  1. Source Folder: C:\Data
  2. Source Folder: D:\Server

  Files:

  1. C:\Data\Work\test.txt
  2. C:\Data\Home\info.txt
  3. D:\Server\Backup\data.txt

  Files 1 and 2 are not compared. Only files 1 & 3 and 2 & 3 are compared with each other.

- Compare only files within the same source and sub folder

  This comparison method only compares files that are in the same source folder and the same subfolder.

  Example:

  1. Source Folder: C:\Data
  2. Source Folder: D:\Server

  Files:

  1. C:\Data\Work\info.txt
  2. C:\Data\Home\info.txt

3. C:\Data\Home\todo.txt
4. D:\Server\Work\info.txt
5. D:\Server\Work\prg.txt
6. D:\Server\Home\info.txt

Only files 2 & 3 and 4 & 5 are compared.

Options

Don't search folders (NTFS junction points) that point to the contents of another folder

NTFS junction points are empty folders that point to the contents of another folder. This option enables you to prevent these folders from being searched and processed. This option is activated by default. When deactivating this option you should check first that no loops are created by the junction points and no data items are processed twice.

Disable Windows 64-bit file system redirection

This option enables AllDup to determine the correct count of all system files on a 64-bit Windows system.

Search Methods

The following search methods are available to find duplicate files:

- Find duplicate files on the basis of their properties
- Find similar file names
- Find similar pictures
- Find similar audio files
- Find video & audio files on the basis of the audio length
- Find hard links

Options

Don't compare hard linked files

With this option, no hard link files are compared in terms of content for the search criteria File Content and Find similar pictures.

Find Duplicate Files on the Basis of their Properties

With this search method, you can combine the following file properties to search for duplicate files:

- File NameFinds files with the same name (without extension)
- File Extension
  Finds files with the same extension
- File Size
  Finds files with the same size
- File Content
  Finds files with the same or similar content
- Last Modified Date
  Finds files with the same last modified date
- Creation Date
  Finds files with the same creation date
- File Attributes
  Finds files with the same attributes

Options

Ignore timestamp

This option enables you to ignore the timestamp when using the search method *creation date* or *last modified date*.

Ignore seconds

This option enables you to ignore the seconds from the timestamp when using the search method *creation date* or *last modified date*.

File Name

This file property can be used to find files with the same or a similar name.

Comparison Methods

The following comparison methods are available for comparing the file names:

- ### Compare all characters of a file name

  With this comparison method, the complete file name is compared.

- ### Compare only characters at the beginning of a file name

  With this comparison method, only a certain number of characters at the beginning of a file name are compared.

- ### Compare only characters at the end of a file name

  With this comparison method, only a certain number of characters at the end of a file name are compared.

- ### Ignore characters at the end of a file name

  With this comparison method, a certain number of characters at the end of a file name can be ignored.

Ignore certain characters in filenames

This option allows certain characters to be ignored when comparing file names. For example, if you specify the plus and minus signs (+-) in the text field, then the file names 'Test-01' and 'Test+01' are recognized as equal.

Ignore certain strings in filenames

With this option certain strings can be ignored when comparing file names. Multiple strings must be separated with a slash character (/). For example, if you specify the string "001/002", then the filenames 'Test001' and 'Test002' will be recognized as duplicates.

File Content

This file property can be used to find files with the same or similar content.

Comparison Method

The following methods are available for the content comparison:

- Byte by byte
- Checksum MD5 (128-Bit)
- Checksum SHA-1 (160-Bit)
- Checksum SHA-2 (256-Bit)
- Checksum SHA-2 (384-Bit)
- Checksum SHA-2 (512-Bit)

Byte by byte

With this comparison method, the content of the files to be compared is read in chunk by chunk and compared with one another. With a specified percentage match of 100%, the file comparison stops as soon as a difference is found. If the percentage match is less than 100%, the complete file content is always compared so that the percentage match can be calculated. Example: If a percentage match of 90% is specified, all files that have a match of 90% or higher are classified as duplicates.

Checksum

The checksum method reads the complete file content and creates a checksum of the content for further comparisons. Using a checksum could be much faster than a *byte-by-byte* comparison when you compare a lot of files. Comparing only the stored checksum will avoid reading the complete content of these files again and again. See Speed Comparison Test.

Ignore ID3 Tags of MP3 files

This option enables you to ignore the following tags inside MP3 files:

- ID3v1
- ID3v2
- Lyrics3 v2

- APE v2

Info: AllDup also ignores ID3v2 tags at the beginning of the MP3 file that exists twice and ID3v1 tags at the end of the file that exists twice.

Ignore metadata of JPEG/CR2 files

With this option, only the compressed image data inside files with the extension "JPEG", "JPG" and "CR2" will be compared.

Ignore metadata of FLAC files

This option enables you to ignore all the metadata inside FLAC files.

First compare a data block at the end of the files

With this option a data block at the end of both files will be compared first. The file comparison will be stopped if the data blocks are not identical. Otherwise, AllDup continues the file comparison at the start of the file.

Block size of the read buffer

This option enables you to change the block size of the read buffer for the content compare.

1. The file comparison starts with a block size specified by the *start* value.
2. AllDup reads the block size from the two files into the memory and compares them.
3. The file comparison will be stopped if the data blocks are not identical.
4. Otherwise, the block size will be increased by the *increment* value until it reaches the *maximum* value and continues comparing the files (2).

Find Similar File Names

Comparison Method

The following comparison methods are available:

- SmartMatch
- FuzzyMatch
- Levenshtein
- Ratcliff-Obershelp
- MatchDiff
- WordMatch
- FuzzyPercent
- Simil

All comparison methods except *WordMatch* performing different text comparisons and calculations between the two file names to calculate the perceptual match between them. The comparison method *WordMatch* splits the file names into separate words and calculates the perceptual match by comparing the words. All comparison methods are case-insensitive, meaning no distinction is made between uppercasing and lowercasing when performing the comparison.

Match

This is the degree of match that must exist between the file names in order to be offered as duplicates.

Delimiter

Here you can specify the delimiter characters for the comparison method *WordMatch* to split the file names into words. For example the file name "aa_bb_cc" will be split into the word collection "aa", "bb" and "cc" by using the delimiter character underscore ("_"). The standard delimiter characters are space (" "), comma (","), underscore ("_"), dot ("."), semicolon (";") and minus ("-"). You can specify any number of delimiter characters.

Examples

The following file name comparison examples give you an overview which comparison method could be suitable for your search for similar file names. The duration at the right table column shows the necessary time to perform 10.000 file name comparisons.

1. Example

File name A: "Wolfgang Amadeus Mozart"
File name B: "Wolfgang_Amadeus_Mozart"

COMPARISON METHOD	MATCH	DURATION
FuzzyMatch	88,34%	0,63s
SmartMatch	91,30%	0,75s
Levenshtein	91,30%	1,16s
Ratcliff-Obershelp	82,61%	1,53s
MatchDiff	91,30%	0,09s
WordMatch	100,00%	0,33s
FuzzyPercent	56,58%	0,33s
Simil	83,33%	0,01s

2. Example

File name A: "Wolfgang Amadeus Mozart - 001"
File name B: "Wolfgang Amadeus Mozart - 002"

COMPARISON METHOD	MATCH	DURATION
FuzzyMatch	96,43%	1,41s
SmartMatch	96,55%	1,09s
Levenshtein	96,55%	1,83s
Ratcliff-Obershelp	96,55%	0,22s
MatchDiff	96,55%	0,07s
WordMatch	75,00%	0,50s
FuzzyPercent	98,06%	0,54s
Simil	93,33%	0,01s

3. Example

File name A: "001 - Wolfgang Amadeus Mozart"
File name B: "002 - Wolfgang Amadeus Mozart"

COMPARISON METHOD	MATCH	DURATION
FuzzyMatch	96,31%	1,38s
SmartMatch	96,55%	1,00s
Levenshtein	96,55%	1,81s
Ratcliff-Obershelp	96,55%	0,60s
MatchDiff	96,55%	0,07s
WordMatch	75,00%	0,42s
FuzzyPercent	71,84%	0,49s
Simil	93,33%	0,01s

4. Example

File name A: "Wolfgang Amadeus Mozart"
File name B: "Wolfgang Amadeus Mozart - BACKUP"

COMPARISON METHOD	MATCH	DURATION
FuzzyMatch	70,97%	1,93s
SmartMatch	83,64%	0,83s
Levenshtein	71,88%	1,59s
Ratcliff-Obershelp	83,64%	0,15s
MatchDiff	71,88%	0,05s
WordMatch	75,00%	0,39s
FuzzyPercent	77,95%	0,91s
Simil	78,57%	0,01s

5. Example

File name A: "Wolfgang - Amadeus , Mozart"
File name B: "Mozart_Amadeus;Wolfgang"

COMPARISON METHOD	MATCH	DURATION
FuzzyMatch	49,29%	0,42s
SmartMatch	32,00%	0,53s
Levenshtein	37,04%	1,43s
Ratcliff-Obershelp	32,00%	1,88s
MatchDiff	29,63%	0,30s
WordMatch	100,00%	0,36s
FuzzyPercent	26,32%	0,38s
Simil	23,08%	0,02s

6. Example

File name A: "Wolfgang Amadeus Mozart"
File name B: "Mozart Wolfgang Amadeus"

COMPARISON METHOD	MATCH	DURATION
FuzzyMatch	70,55%	0,65s
SmartMatch	69,57%	0,56s
Levenshtein	39,13%	1,20s
Ratcliff-Obershelp	69,57%	0,40s
MatchDiff	69,57%	0,17s
WordMatch	100,00%	0,34s
FuzzyPercent	57,89%	0,37s
Simil	0,00%	0,01s

7. Example

File name A: "Wolfgang Amadeus Mozart"
File name B: "Wulfgang Amadues Mazort"

COMPARISON METHOD	MATCH	DURATION
FuzzyMatch	88,54%	0,86s
SmartMatch	82,61%	0,66s
Levenshtein	78,26%	1,23s
Ratcliff-Obershelp	73,91%	1,30s
MatchDiff	82,61%	0,26s
WordMatch	0,00%	0,33s
FuzzyPercent	36,84%	0,33s
Simil	58,33%	0,02s

8. Example

File name A: "Wolfgang Amadeus Mozart"
File name B: "Ludwig van Beethoven"

COMPARISON METHOD	MATCH	DURATION
FuzzyMatch	37,15%	1,07s
SmartMatch	32,56%	0,75s
Levenshtein	21,74%	1,13s
Ratcliff-Obershelp	27,91%	3,68s
MatchDiff	21,74%	0,61s
WordMatch	0,00%	0,30s
FuzzyPercent	5,26%	0,29s
Simil	0,00%	0,01s

9. Example

File name A: "Beethoven"
File name B: "nevohteeb"

COMPARISON METHOD	MATCH	DURATION
FuzzyMatch	72,22%	0,21s

COMPARISON METHOD	MATCH	DURATION
SmartMatch	22,22%	0,14s
Levenshtein	33,33%	0,25s
Ratcliff	22,22%	0,34s
MatchDiff	22,22%	0,14s
WordMatch	0,00%	0,15s
FuzzyPercent	8,70%	0,12s
Simil	0,00%	0,01s

Find Similar Pictures

This search method enables you to find similar or almost identical pictures. For each image will be a checksum calculated for further comparison with all other images.

Comparison Method

The comparison methods aHash, bHash, dHash, mHash and pHash enables you to find similar or almost identical pictures by using a percent match lower than 100%. If you want to find exactly the same pictures you have to use a percent match of 100% or the comparison methods MD5/SHA. An overview of the recognition rate of the comparison methods aHash, bHash, dHash, mHash and pHash can be found here. You can find more information about the comparison methods aHash, bHash, dHash, mHash and pHash in the articles Testing different image hash functions and Detection of Duplicate Images Using Image Hash Functions on the Internet.

- aHash

  The comparison method aHash (Average Hash) resizes the image to 8x8 or 16x16 pixel. The image is then converted to grayscale and the average color value of all image pixels is calculated. Then all image pixels are compared with the average color value and the checksum is calculated.

- bHash

  The comparison method bHash (Blockhash) resizes the image to 128x128, 256x256 or 512x512 pixel. The image will be divided into a block matrix and the median value of all blocks will be calculated to create the checksum. The options "*Fast*" and "*Precise*" enables you to influence the accuracy of the checksum calculation.

- dHash

  The comparison method dHash (Difference Hash) resizes the image to 8x8 or 16x16 pixel. After that, the image is converted to grayscale and the checksum is created by comparing the difference in brightness values ??between all neighboring pixels.

- mHash

  The comparison method mHash (Median Hash) resizes the image to 8x8 or 16x16 pixel. The image is then converted to grayscale and the mean color value of all image pixels is determined. Then all image pixels are compared with the mean color value and the checksum is calculated.

- pHash

  The comparison method pHash (Perceptual Hash) resizes the image to 32x32 pixel. The image is then converted to grayscale and transformed by a discrete cosine transform (DCT). Next, the mean color value of all pixels in the image area (8x8) in the top left of the image is determined. Then the checksum is calculated by comparing the color value of all pixels from the top left image area with the mean color value.

- MD5, SHA

  These comparison methods can only be used to find exactly the same images. The following comparison methods are available:

  - MD5 (128-Bit)
  - SHA-1 (160-Bit)
  - SHA-2 (256-Bit)
  - SHA-2 (384-Bit)
  - SHA-2 (512-Bit)

Calculation time of the checksums

Using the comparison methods aHash, bHash, dHash, mHash and pHash, we have calculated the time required to create a checksum and listed it in the following table:

COMPARISON METHOD	PICTURE AREA	CHECKSUM	EXPENDITURE OF TIME
aHash	8x8	64-bit	0,0450 ms
aHash	16x16	256-bit	0,1425 ms
bHash (fast)	256x256	256-bit	9,6030 ms
bHash (precise)	256x256	256-bit	28,4792 ms
dHash	8x8	64-bit	0,0458 ms
dHash	16x16	256-bit	0,0988 ms
mHash	8x8	64-bit	0,1435 ms
mHash	16x16	256-bit	1,1012 ms
pHash	32x32	64-bit	8,6922 ms

Hints

The following files will be automatically excluded from the search:

- Files with a size of 0 bytes
- Pictures with a width or height smaller than the specified compare size
- Corrupted, invalid or incomplete pictures **(*)**
- Files with a blocked read access **(*)**

(*) An error message will be shown at the log pane.

Image Formats

Here you can specify which image formats should be checked during a search. Image files with the following file extensions are supported: 3FR, ARW, BMP, CR2, CRW, CUT, DCR, DIB, DNG, EMF, ERF, GIF, HDP, ICO, IFF, J2C, J2K, JP2, JPE, JPG, JPEG, JPX, JFIF, KDC, MDC, MEF, MOS, MRW, NEF, ORF, PEF, PBM, PCX, PGM, PNG, PPM, PSD, RAF, RAS, RAW, RW2, SRW, TGA, TIF, TIFF, RAS, RLE, WBMP, WEBP, WMF and X3F.

Percentage Match

Here you can specify the minimum percentage matching of two pictures. The calculated percentage matching between two pictures will be shown at the column *Match*. The percentage always refers to the reference picture of a group which will be shown in a different text color.

Picture Area

This option enables you to specify the picture area to be used to create the checksum. The following options are available:

1. entire picture
2. area in the upper left corner
3. area in the upper right corner
4. area in the lower left corner
5. area in the lower right corner

When using the options 2, 3, 4 or 5, the size of the picture area can be specified in pixel. For example, a value of 16 pixel will be using a picture area with a width and height of 16 pixel at the selected corner.

Compare Size

Here you can specify the maximum width and height of the pictures to be compared. A lower compare size finds more similar pictures and speeds up the comparison time. A higher compare size finds more identical pictures and less similar pictures and of course needs more time to compare them.

Checksum

The size of the checksum in bits is displayed here. The checksum can only be changed when using the bHash comparison method.

Compare only pictures with the same properties

This option will be performed before the option Detect picture modifications. The following picture properties are available:

File Name

This option enables you to compare only pictures with the same file name.

File Extension

This option enables you to compare only pictures with the same file extension.

Width and Height

This option enables you to compare only pictures with the same width and height.

Orientation

This option enables you to compare only pictures with the same orientation (portrait or landscape).

Aspect Ratio

This option enables you to compare only pictures with the same aspect ratio. The calculation of the aspect ratio is done by the formula "*width divided by height*". The result of the calculation is truncated to one decimal place. A picture with 1920x1080 pixel has an aspect ratio of "1.7".

Detect picture modifications (slower)

This option enables you to detect different picture modifications when comparing two pictures. For this purpose, each picture modification will be performed with the picture to be compared and in each case an additional checksum will be created. The following picture modifications can be detected:

- Rotated 90° to the right
- Rotated 180° to the right
- Rotated 90° to the left
- Flipped horizontally
- Rotated 90° to the right and flipped horizontally
- Flipped vertically
- Rotated 90° to the left and flipped horizontally

Recognition Rate Test

We have carried out tests with various comparison methods to determine the recognition rate for different image changes. For this purpose, 29 copies of a JPEG image (1600x1200px, 606KB) were created and their color, size and format changed. The tests always compared the original JPEG image and a modified copy of the image.

The following comparison methods were used in the test:

COMPARISON METHOD	COMPARE SIZE	CHECKSUM
aHash[1]	8x8	64-bit
aHash[2]	16x16	256-bit
bHash[1] (fast)	256x256	256-bit
bHash[2] (precise)	256x256	256-bit
dHash	16x16	256-bit
mHash	16x16	256-bit
pHash	32x32	64-bit

The percentage values in the table below show how well a comparison method recognizes the change in the image copy:

Image Modification	aHash[1]	aHash[2]	bHash[1]	bHash[2]	dHash	mHash	pHash
Image reduction to 75%	100%	100%	100%	100%	100%	100%	97%
Image reduction to 50%	100%	100%	100%	100%	99%	100%	100%
Image reduction to 25%	100%	100%	100%	100%	99%	100%	97%
Image enlargement to 150%	100%	100%	100%	100%	100%	100%	100%
Image enlargement to 200%	100%	100%	100%	100%	100%	100%	100%
Conversion to grayscale	97%	98%	97%	93%	97%	96%	97%
Brightness increased by 30%	95%	99%	100%	99%	98%	97%	91%
Brightness decreased by 30%	95%	95%	89%	93%	92%	94%	91%

Image Modification	aHash¹	aHash²	bHash¹	bHash²	dHash	mHash	pHash
Contrast increased by 30%	100%	99%	95%	96%	96%	96%	94%
Contrast decreased by 30%	100%	99%	100%	100%	98%	100%	94%
JPEG quality reduced by 25%	100%	100%	100%	100%	100%	100%	100%
JPEG quality reduced by 50%	100%	100%	100%	100%	99%	100%	100%
JPEG quality reduced by 75%	100%	100%	100%	100%	99%	100%	94%
Image rotated 90° to the left	47%	52%	68%	54%	46%	50%	47%
Image rotated 90° to the right	47%	52%	54%	55%	48%	50%	44%
Image flipped vertically	81%	81%	77%	73%	71%	80%	50%
Image flipped horizontally	69%	59%	62%	64%	54%	61%	47%
Added white frame (30px)	84%	82%	68%	61%	86%	82%	88%
Added black frame (30px)	94%	94%	92%	89%	92%	92%	88%
Image height reduced to 80%	100%	100%	100%	100%	100%	100%	100%
Image width reduced to 80%	100%	100%	100%	100%	99%	100%	100%
Conversion to PNG 24bit	100%	100%	100%	100%	100%	100%	100%
Conversion to BMP 24bit	100%	100%	100%	100%	100%	100%	100%
Conversion to GIF 256 colors	100%	100%	100%	99%	99%	100%	97%
Cropped 100 pixel from the left edge	92%	91%	88%	71%	82%	92%	78%
Cropped 100 pixel from the right edge	97%	92%	86%	86%	85%	90%	91%
Cropped 100 pixel from the top edge	94%	88%	86%	83%	86%	89%	84%
Cropped 100 pixel from the bottom edge	98%	91%	87%	86%	86%	91%	84%
Cropped 100 pixel from all edges	89%	80%	77%	75%	70%	80%	62%

The following table gives you an overview of how many duplicates were found with the various comparison methods in the test. The evaluation was carried out with a Percentage Match of at least 70%, 80% and 90%.

COMPARISON METHOD	70%	80%	90%
aHash[1] (64-bit)	26	26	23
aHash[2] (256-bit)	26	26	22
bHash[1] (fast)	25	23	18
bHash[2] (precise)	25	22	18
dHash (256-bit)	26	24	19
mHash (256-bit)	26	26	22
pHash (64-bit)	26	24	19

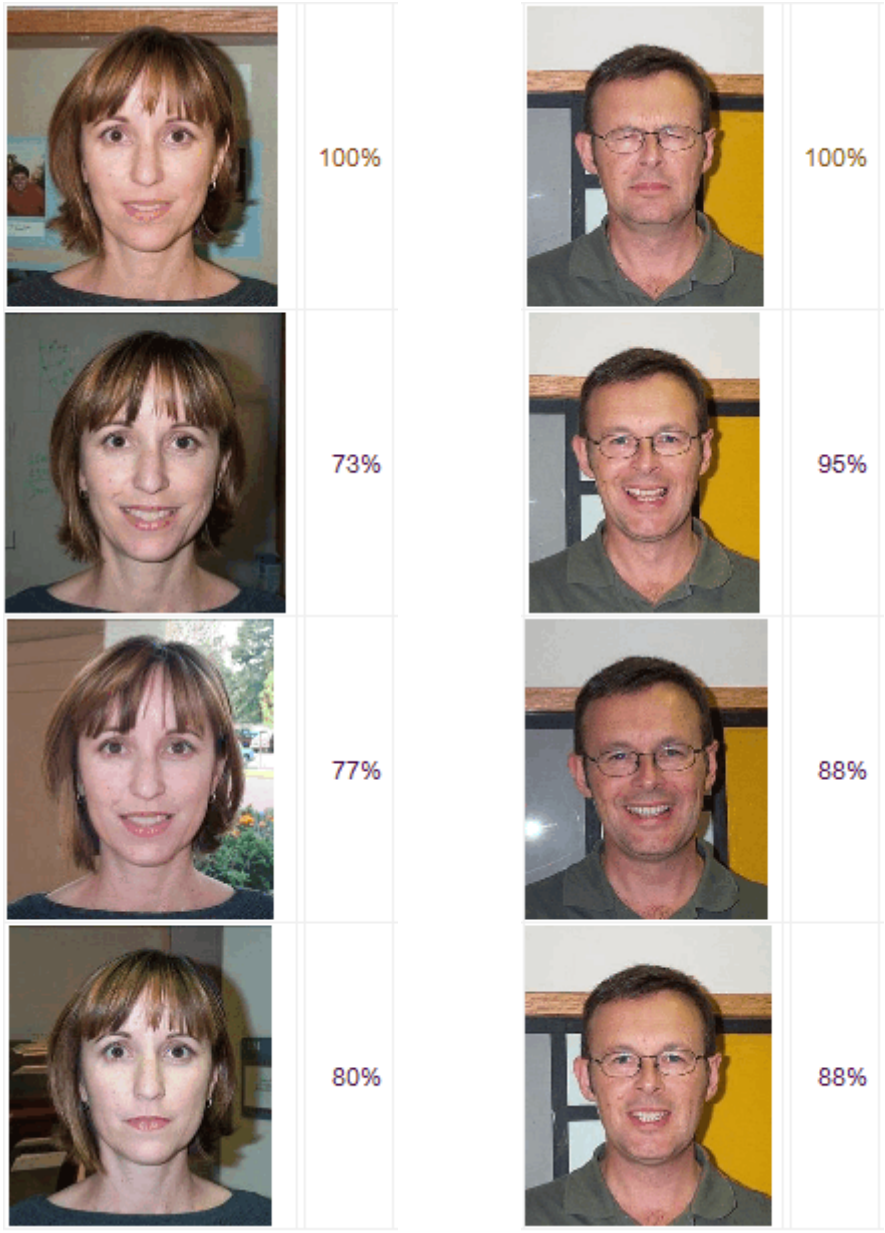
Examples

The displayed search results were created with the following settings:

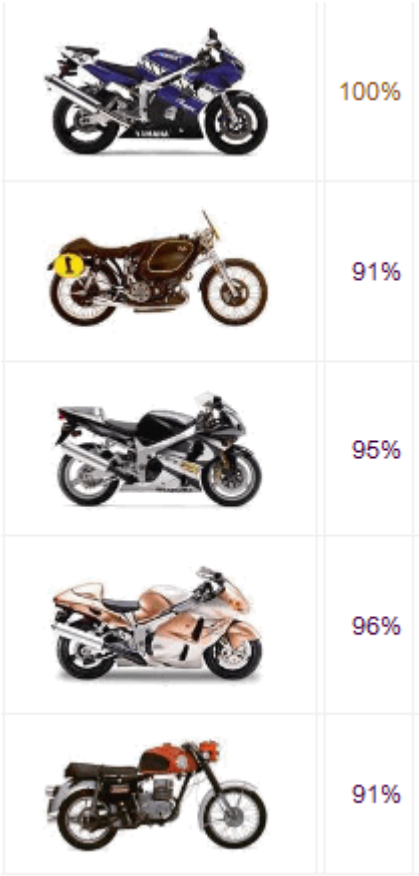
- Comparison method: aHash
- Compare size: 16x16
- Checksum: 256-bit

All images used are from the Caltech101 image collection.

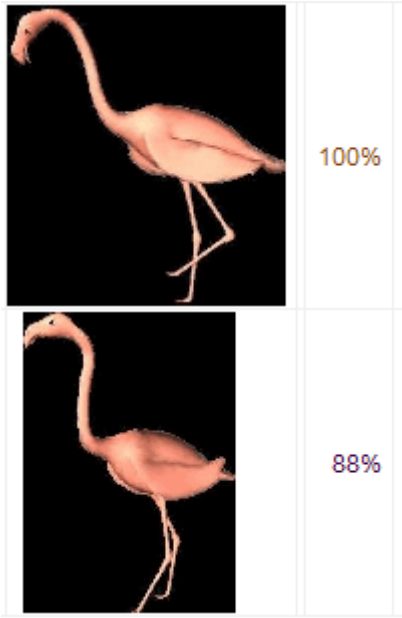
Different shots of the same person



Shots of different motorcycles



The same object in a different pose



Different partial shots of the same subject

100%

88%

False positive duplicates

100%

84%

Find Similar Audio Files

This search method enables you to find similar or almost identical audio files between the file formats MP3, FLAC, WMA, WAV, OGG, APE, AAC, MKA, M4A, M4R and MP2. The audio stream of each audio file will be analyzed and a checksum is calculated for further comparison with other audio files.

The following files will be automatically excluded from the search:

- Files without the extension MP3, FLAC, WMA, WAV, OGG, APE, AAC, AIF, AIFF, MKA, M4A, M4R and MP2
- Files with a size of 0 bytes
- Corrupted, invalid or incomplete audio files **(*)**
- Files with a blocked read access **(*)**

(*) An error message will be shown at the log pane.

Scan length

Here you can specify how many seconds at the beginning of the audio file should be used to calculate the checksum. A value between 15 and 999 seconds can be set for the scan length. The standard value for the scan length is 30 seconds.

Percentage Match

Here you can specify the minimum percentage matching of two audio files. The calculated percentage matching between two audio files will be shown at the column *Match*. The percentage always refers to the reference audio file of a group which will be shown in a different text color.

Comparison Method

Here you can specify the comparison method to be used to generate the checksum. The standard value for this option is 4.

- 1 - no information available

- 2 - no information available
- 4 - Ignores leading silence
- 5 - no information available

Compare only files with the same file extension

This option enables you to compare only audio files with the same file extension.

Recognition Rate

We have done several tests to determine the recognition rate for similar or almost identical audio files using different options. For the tests we have converted a WAV file (1411 Kbits/s 16bit 44100kHz Stereo) into different audio formats. All new audio files have been converted with stereo sound unless explicitly described otherwise. The percent match values at the following tables will give you an overview which options are the best to detect duplicates between the different audio formats. The title of the column header with the highest percent matches in a column is set into square brackets.

Test 'Comparison Methods'

At this test all audio files were compared 4 times with one base file using all available comparison methods (1, 2, 4 and 5). A scan length of 30 seconds was used by this test.

Base file: WAV 16bit 44100 kHz

	File size	1	2	[4]	5
AAC 128kbps 44100kHz	2,42 MB	**79%**	**79%**	77%	75%
AAC 192kbps 48000kHz	3,12 MB	**82%**	81%	78%	74%
AAC 256kbps 48000kHz	3,12 MB	**82%**	81%	78%	74%
AAC 48000kHz 32bit	2,46 MB	74%	77%	**83%**	58%
AAC 64kbps 22050kHz mono	0,72 MB	**73%**	72%	**73%**	68%
AAC 96kbps 22050kHz	1,43 MB	**76%**	74%	74%	70%
APE 48000kHz 16bit	15,84 MB	87%	86%	**92%**	71%
FLAC 22050kHz 16bit mono	5,14 MB	**100%**	**100%**	**100%**	**100%**

	File size	1	2	[4]	5
FLAC 44100kHz 16bit	16,93 MB	**100%**	**100%**	**100%**	**100%**
FLAC 48000kHz 16bit	17,38 MB	**100%**	**100%**	**100%**	**100%**
M4A 128kbps 44100kHz	2,42 MB	**79%**	**79%**	77%	75%
M4A 192kbps 48000kHz	3,12 MB	**82%**	81%	78%	74%
M4A 256kbps 48000kHz	3,12 MB	**82%**	81%	78%	74%
M4A 64kbps 22050kHz mono	0,72 MB	**73%**	72%	**73%**	68%
M4A 96kbps 22050kHz	1,43 MB	**76%**	74%	74%	70%
M4R 160kbps 44100kHz	0,76 MB	94%	**95%**	90%	**95%**
M4R 256kbps 44100kHz	1,21 MB	95%	96%	96%	**97%**
MKA 48000kHz 32bit	4,72 MB	82%	80%	**83%**	68%
MP2 128kbps 44100kHz	2,40 MB	84%	86%	**94%**	69%
MP2 160kbps 44100kHz	3,00 MB	84%	86%	**96%**	69%
MP2 256kbps 44100kHz	4,79 MB	84%	86%	**99%**	70%
MP2 64kbps 22050kHz mono	1,20 MB	76%	76%	**99%**	58%
MP3 128kbps 44100kHz	2,40 MB	91%	91%	**92%**	87%
MP3 192kbps 48000kHz	3,59 MB	**96%**	95%	**96%**	**96%**
MP3 256kbps 48000kHz	4,79 MB	98%	**99%**	98%	97%
MP3 320kbps 48000kHz	5,99 MB	99%	99%	**100%**	98%
MP3 96kbps 22050kHz mono	1,80 MB	**97%**	95%	**97%**	95%
MP3 VBR0 44100kHz	4,24 MB	66%	67%	**96%**	54%
MP3 VBR1 44100kHz	3,88 MB	67%	67%	**97%**	54%
MP3 VBR5 44100kHz	2,68 MB	65%	66%	**90%**	53%
MP3 VBR9 44100kHz	2,40 MB	66%	67%	**96%**	54%
OGG 128kbps 44100kHz	2,17 MB	**93%**	90%	90%	87%
OGG 160kbps 44100kHz	2,17 MB	**93%**	90%	90%	87%

	File size	1	2	[4]	5
OGG 240kbps 48000kHz	3,31 MB	**96%**	94%	95%	94%
OGG 320kbps 48000kHz	4,48 MB	97%	96%	**98%**	96%
OGG 64kbps 22050kHz mono	1,19 MB	**94%**	93%	93%	93%
WAV 8bit 22050kHz mono	3,30 MB	99%	**100%**	93%	98%
WMA 128kbps 44100kHz	2,43 MB	53%	54%	**93%**	49%
WMA 192kbps 48000kHz	3,64 MB	54%	55%	**93%**	50%
WMA 256kbps 48000kHz	4,85 MB	**98%**	97%	97%	97%
WMA 384kbps 48000kHz	4,85 MB	**98%**	97%	97%	97%
WMA 96kbps 22050kHz mono	0,39 MB	54%	54%	**73%**	49%

Base file: MP3 192kbps 48000 kHz

	File size	[1]	2	4	5
AAC 128kbps 44100kHz	2,42 MB	**79%**	77%	76%	75%
AAC 192kbps 48000kHz	3,12 MB	**81%**	80%	78%	75%
AAC 256kbps 48000kHz	3,12 MB	**81%**	80%	78%	75%
AAC 48000kHz 32bit	2,46 MB	74%	76%	**82%**	57%
AAC 64kbps 22050kHz mono	0,72 MB	**74%**	72%	73%	67%
AAC 96kbps 22050kHz	1,43 MB	**75%**	**75%**	74%	69%
APE 48000kHz 16bit	15,84 MB	86%	85%	**91%**	71%
FLAC 22050kHz 16bit mono	5,14 MB	**96%**	95%	**96%**	**96%**
FLAC 44100kHz 16bit	16,93 MB	**96%**	95%	**96%**	**96%**
FLAC 48000kHz 16bit	17,38 MB	**96%**	95%	**96%**	**96%**
M4A 128kbps 44100kHz	2,42 MB	**79%**	77%	76%	75%
M4A 192kbps 48000kHz	3,12 MB	**81%**	80%	78%	75%
M4A 256kbps 48000kHz	3,12 MB	**81%**	80%	78%	75%

	File size	[1]	2	4	5
M4A 64kbps 22050kHz mono	0,72 MB	**74%**	72%	73%	67%
M4A 96kbps 22050kHz	1,43 MB	**75%**	**75%**	74%	69%
M4R 160kbps 44100kHz	0,76 MB	93%	**94%**	89%	**94%**
M4R 256kbps 44100kHz	1,21 MB	**94%**	93%	93%	**94%**
MKA 48000kHz 32bit	4,72 MB	80%	81%	**82%**	68%
MP2 128kbps 44100kHz	2,40 MB	83%	86%	**93%**	69%
MP2 160kbps 44100kHz	3,00 MB	84%	85%	**94%**	69%
MP2 256kbps 44100kHz	4,79 MB	84%	85%	**96%**	69%
MP2 64kbps 22050kHz mono	1,20 MB	76%	76%	**96%**	57%
MP3 128kbps 44100kHz	2,40 MB	**91%**	90%	89%	86%
MP3 256kbps 48000kHz	4,79 MB	**97%**	96%	96%	95%
MP3 320kbps 48000kHz	5,99 MB	**96%**	**96%**	**96%**	95%
MP3 96kbps 22050kHz mono	1,80 MB	**95%**	94%	**95%**	93%
MP3 VBR0 44100kHz	4,24 MB	66%	67%	**93%**	54%
MP3 VBR1 44100kHz	3,88 MB	67%	66%	**94%**	54%
MP3 VBR5 44100kHz	2,68 MB	65%	66%	**90%**	53%
MP3 VBR9 44100kHz	2,40 MB	66%	67%	**94%**	54%
OGG 128kbps 44100kHz	2,17 MB	**91%**	90%	89%	87%
OGG 160kbps 44100kHz	2,17 MB	**91%**	90%	89%	87%
OGG 240kbps 48000kHz	3,31 MB	**94%**	92%	93%	91%
OGG 320kbps 48000kHz	4,48 MB	**95%**	94%	94%	94%
OGG 64kbps 22050kHz mono	1,19 MB	**93%**	92%	91%	**93%**
WAV 16bit 44100kHz	26,41 MB	**96%**	95%	**96%**	**96%**
WAV 8bit 22050kHz mono	3,30 MB	**96%**	**96%**	90%	**96%**
WMA 128kbps 44100kHz	2,43 MB	54%	54%	**92%**	49%

	File size	[1]	2	4	5
WMA 192kbps 48000kHz	3,64 MB	54%	55%	**92%**	50%
WMA 256kbps 48000kHz	4,85 MB	95%	**96%**	**96%**	94%
WMA 384kbps 48000kHz	4,85 MB	95%	**96%**	**96%**	94%
WMA 96kbps 22050kHz mono	0,39 MB	54%	54%	**74%**	49%

Base file: MP3 VBR0 44100 kHz

	File size	1	2	[4]	5
AAC 128kbps 44100kHz	2,42 MB	66%	64%	**77%**	52%
AAC 192kbps 48000kHz	3,12 MB	65%	66%	**77%**	52%
AAC 256kbps 48000kHz	3,12 MB	65%	66%	**77%**	52%
AAC 48000kHz 32bit	2,46 MB	78%	77%	**84%**	63%
AAC 64kbps 22050kHz mono	0,72 MB	62%	62%	**73%**	51%
AAC 96kbps 22050kHz	1,43 MB	62%	62%	**75%**	52%
APE 48000kHz 16bit	15,84 MB	63%	62%	**91%**	52%
FLAC 22050kHz 16bit mono	5,14 MB	66%	67%	**96%**	54%
FLAC 44100kHz 16bit	16,93 MB	66%	67%	**96%**	54%
FLAC 48000kHz 16bit	17,38 MB	66%	67%	**96%**	54%
M4A 128kbps 44100kHz	2,42 MB	66%	64%	**77%**	52%
M4A 192kbps 48000kHz	3,12 MB	65%	66%	**77%**	52%
M4A 256kbps 48000kHz	3,12 MB	65%	66%	**77%**	52%
M4A 64kbps 22050kHz mono	0,72 MB	62%	62%	**73%**	51%
M4A 96kbps 22050kHz	1,43 MB	62%	62%	**75%**	52%
M4R 160kbps 44100kHz	0,76 MB	66%	68%	**91%**	54%
M4R 256kbps 44100kHz	1,21 MB	66%	68%	**95%**	54%
MKA 48000kHz 32bit	4,72 MB	62%	63%	**82%**	51%

	File size	1	2	[4]	5
MP2 128kbps 44100kHz	2,40 MB	72%	73%	**92%**	57%
MP2 160kbps 44100kHz	3,00 MB	72%	73%	**94%**	57%
MP2 256kbps 44100kHz	4,79 MB	73%	74%	**96%**	57%
MP2 64kbps 22050kHz mono	1,20 MB	79%	81%	**96%**	63%
MP3 128kbps 44100kHz	2,40 MB	66%	66%	**90%**	54%
MP3 192kbps 48000kHz	3,59 MB	66%	67%	**93%**	54%
MP3 256kbps 48000kHz	4,79 MB	66%	68%	**95%**	54%
MP3 320kbps 48000kHz	5,99 MB	66%	68%	**96%**	54%
MP3 96kbps 22050kHz mono	1,80 MB	66%	67%	**94%**	54%
MP3 VBR1 44100kHz	3,88 MB	95%	**96%**	**96%**	93%
MP3 VBR5 44100kHz	2,68 MB	91%	**92%**	**92%**	86%
MP3 VBR9 44100kHz	2,40 MB	94%	**95%**	**95%**	94%
OGG 128kbps 44100kHz	2,17 MB	65%	67%	**90%**	53%
OGG 160kbps 44100kHz	2,17 MB	65%	67%	**90%**	53%
OGG 240kbps 48000kHz	3,31 MB	66%	67%	**93%**	53%
OGG 320kbps 48000kHz	4,48 MB	67%	68%	**96%**	54%
OGG 64kbps 22050kHz mono	1,19 MB	66%	67%	**92%**	53%
WAV 16bit 44100kHz	26,41 MB	66%	67%	**96%**	54%
WAV 8bit 22050kHz mono	3,30 MB	66%	68%	**93%**	54%
WMA 128kbps 44100kHz	2,43 MB	59%	64%	**91%**	51%
WMA 192kbps 48000kHz	3,64 MB	62%	66%	**90%**	52%
WMA 256kbps 48000kHz	4,85 MB	66%	67%	**95%**	54%
WMA 384kbps 48000kHz	4,85 MB	66%	67%	**95%**	54%
WMA 96kbps 22050kHz mono	0,39 MB	58%	61%	**75%**	51%

Test 'Scan length'

At this test all audio files were compared 4 times with one base file using the different scan lengths 10, 30, 60 and 90 seconds and the comparison method number 4.

Base file: MP3 192kbps 48000 kHz

	File size	**[10s]**	30s	60s	90s
AAC 128kbps 44100kHz	2,42 MB	**78%**	76%	76%	76%
AAC 192kbps 48000kHz	3,12 MB	77%	**78%**	76%	76%
AAC 256kbps 48000kHz	3,12 MB	77%	**78%**	76%	76%
AAC 48000kHz 32bit	2,46 MB	**82%**	**82%**	**82%**	**82%**
AAC 64kbps 22050kHz mono	0,72 MB	**76%**	73%	71%	71%
AAC 96kbps 22050kHz	1,43 MB	**74%**	**74%**	72%	72%
APE 48000kHz 16bit	15,84 MB	**92%**	91%	90%	90%
FLAC 22050kHz 16bit mono	5,14 MB	**96%**	**96%**	**96%**	**96%**
FLAC 44100kHz 16bit	16,93 MB	**96%**	**96%**	**96%**	**96%**
FLAC 48000kHz 16bit	17,38 MB	**96%**	**96%**	**96%**	**96%**
M4A 128kbps 44100kHz	2,42 MB	**78%**	76%	76%	76%
M4A 192kbps 48000kHz	3,12 MB	77%	**78%**	76%	76%
M4A 256kbps 48000kHz	3,12 MB	77%	**78%**	76%	76%
M4A 64kbps 22050kHz mono	0,72 MB	**76%**	73%	71%	71%
M4A 96kbps 22050kHz	1,43 MB	**74%**	**74%**	72%	72%
M4R 160kbps 44100kHz	0,76 MB	**89%**	**89%**	88%	88%
M4R 256kbps 44100kHz	1,21 MB	**95%**	93%	94%	94%
MKA 48000kHz 32bit	4,72 MB	**86%**	82%	81%	81%
MP2 128kbps 44100kHz	2,40 MB	**94%**	93%	93%	93%
MP2 160kbps 44100kHz	3,00 MB	**94%**	**94%**	**94%**	**94%**

	File size	[10s]	30s	60s	90s
MP2 256kbps 44100kHz	4,79 MB	95%	**96%**	**96%**	**96%**
MP2 64kbps 22050kHz mono	1,20 MB	**96%**	**96%**	**96%**	**96%**
MP3 128kbps 44100kHz	2,40 MB	**91%**	89%	89%	89%
MP3 256kbps 48000kHz	4,79 MB	**96%**	**96%**	95%	95%
MP3 320kbps 48000kHz	5,99 MB	**97%**	96%	96%	96%
MP3 96kbps 22050kHz mono	1,80 MB	**96%**	95%	95%	95%
MP3 VBR0 44100kHz	4,24 MB	92%	93%	**94%**	**94%**
MP3 VBR1 44100kHz	3,88 MB	93%	**94%**	93%	93%
MP3 VBR5 44100kHz	2,68 MB	87%	90%	**91%**	**91%**
MP3 VBR9 44100kHz	2,40 MB	93%	**94%**	93%	93%
OGG 128kbps 44100kHz	2,17 MB	83%	**89%**	**89%**	**89%**
OGG 160kbps 44100kHz	2,17 MB	83%	**89%**	**89%**	**89%**
OGG 240kbps 48000kHz	3,31 MB	**94%**	93%	**94%**	**94%**
OGG 320kbps 48000kHz	4,48 MB	91%	**94%**	**94%**	**94%**
OGG 64kbps 22050kHz mono	1,19 MB	87%	91%	**92%**	**92%**
WAV 16bit 44100kHz	26,41 MB	**96%**	**96%**	**96%**	**96%**
WAV 8bit 22050kHz mono	3,30 MB	**91%**	90%	**91%**	**91%**
WMA 128kbps 44100kHz	2,43 MB	**93%**	92%	92%	92%
WMA 192kbps 48000kHz	3,64 MB	**93%**	92%	92%	92%
WMA 256kbps 48000kHz	4,85 MB	**96%**	**96%**	**96%**	**96%**
WMA 384kbps 48000kHz	4,85 MB	**96%**	**96%**	**96%**	**96%**
WMA 96kbps 22050kHz mono	0,39 MB	**78%**	74%	72%	72%

Find video & audio files on the basis of the audio length

This search method enables you to find video and audio files with the same or almost same audio length. The first audio track is always used to determine the audio length. Video and audio files with the following file extensions are supported:

Audio: AAC, AC3, AIFF, APE, AU, DTS, FLAC, M4A, MP2, MP3, OGG, WAV, WMA
Video: ASF, AVI, OGV, M2TS, M4V, MKV, MOV, MP4, MPG, TS, WEBM, WMV

Ignore time difference

This option enables you to find video and audio files with almost the same audio length by specifying a maximum time difference between the duration of the audio tracks.

Compare only files with the same properties

File Name

This option enables you to compare only files with the same file name.

File Extension

This option enables you to compare only files with the same file extension.

Find Hard Links

This search method enables you to search the source folders for hard links. Files with the same hard link ID are grouped together in the search result.

Search Options

Before the search starts

Confirm use of file and folder filter

With this option, the use of the file and folder filters must be confirmed before the search process.

Set the CPU priority for AllDup to 'low'

This option sets AllDup's CPU priority to 'Low' during the scan process.

During the search process

Determine the file owner (slower)

With this option, the owner of a file is determined and displayed in the 'Owner' column in the search result. If you do not activate this option, you can subsequently determine and display the file owner in the search result by clicking on a file or by moving the mouse over the 'Owner' column.

Determine number of hard links per file (slower)

With this option, the number of hard links in a file is determined and displayed in the 'Hard links' column in the search result. If you do not activate this option, you can subsequently determine and display the number of hard links in the search result by clicking on a file or by moving the mouse over the 'Hard links' column.

Determine width and height of image files (slower)

With this option, the width & height of image files is determined during the search and displayed in the search result in the columns 'Width' and 'Height'. If you do not activate this option, you can subsequently determine and display the width and height in the search result by clicking on a file or by moving the mouse over the 'Width' or 'Height' columns.

Determine duration, bit rate and sample rate of files with the following extensions (slower)'

With this option, the duration, bit rate and sampling rate of audio files are determined using the 'MediaInfo' plugin and displayed in the search result in the columns 'Duration', 'Bitrate' and 'Sampling Rate'. If you do not activate this option, you can subsequently determine and display the information in the search result by clicking on a file or by moving the mouse over the 'Duration', 'Bitrate' or 'Sampling Rate' columns.

Log search statistics of the displayed progress info

With this option, the search statistics displayed in the progress info are written to the log at regular intervals. The logging interval can be set in minutes.

Cancel search when certain number of duplicates are found

This option stops the search after a specified number of duplicate files was found.

After the search is complete

Expand all groups in the search result

With this option, all groups in the search result are expanded after the search process.

Remove all groups where the files in a group do not exist in all source folders

This option will remove all groups after the search where the files in a group are not present in all source folders.

Log all files without duplicates (slower)

This option lists all files with no duplicates in the log.

Show only files without duplicates at the search result

With this option only files without duplicates will be shown at the search result.

Play sound file

Here you can specify a music file (MP3/WAV) to be played after the search process.

Archive Files

Scan archive files with the following file extensions

This option enables you to scan the content of archive files for duplicate files. Right-clicking on this option selects or deselects all file extensions.

Single archive files with the following file extensions are supported:

- 7z, arj, cab, cb7, cbr, cbt, cbz, epub, gz, iso, lzh, lha, nrg, rar, tar, zip

Split archive files with the following file extensions are supported:

- .zip (subsequent file: .z01)
- .zip.001
- .rar (subsequent file: .r00)
- .part1.rar
- .7z.001
- .tar.001

Notes:

- Password-protected files from inside an archive and password-protected archive files will be automatically filtered when using the search method File Content, Similar Pictures or Similar music.
- AllDup's file manager can only delete files from inside archives with the extension .zip or .7z.

Delete temporary files after their checksum is created

This option enables you to delete temporary files directly after their checksum was created. This has the advantage of a lower disk space usage while scanning many archive files.
This option will only be used in the following circumstances:

- The search method Similar Pictures is used and the option '*Detect picture modifications*' is deactivated.

- The search method File Content is used and a checksum method is selected at the compare method.

Log password-protected files

This option enables you to log password-protected files from inside an archive and password-protected archive files.

Don't extract files with a size equal or more than ...

This option enables to ignore files inside an archive with a size equal or larger than specified.

Database

This saves the checksums created when using the search methods File content, Similar pictures and Similar audio files in a database. For further searches, the checksums are then determined from the database instead of recalculating them over and over again. This has the advantage that the time-consuming calculation of the checksums of files that have not been changed is no longer necessary and the search therefore takes considerably less time.

The storage of the checksums can be activated for the following search methods:

- File content
  A separate checksum is stored in the database for each comparison method. With 5 comparison methods, up to 5 different checksums can be stored in the database per file.
- Similar pictures
  A separate checksum is stored in the database for each comparison method and checked picture modification. With 9 comparison methods and 7 additional checks for possible picture modifications, up to 72 different checksums can be stored in the database for each picture.
- Similar audio files
  A separate checksum is stored in the database for each scan length and comparison method used.

Notes:

- The database is not available on Windows XP.
- The database can only ever be used by one AllDup instance.

Options

Recalculate checksum if the file size was changed

The checksum of a file will be recalculated if the current file size not match with the stored file size in the database.

Recalculate checksum if the file modified date was changed

The checksum of a file will be recalculated if the current modified date of the file not match with the stored modified date in the database.

Database Tools

Cleanup

Checks the existence of all stored files in the database and removes the files not exist anymore from the database. The process can be canceled with the F10 key.

Reset

Deletes all checksums in the database.

New

Deletes the existing database file and creates a new database file.

File and Folder Filters

You can set different filters for files and folders to exclude certain files from the duplicate file search.

- File filter
- Folder filter

File Filters

File filters enable you to filter specific files during a search operation, i.e. exclude them from the search operation.

Filter Method

The filtering methods *inclusive* and *exclusive* enable you to determine how filter texts are to be applied during a search operation.

- Inclusive

  Only files matching an activated filter text are included in the search operation. Example: If you specify the filter text "*.ini" only files with the ".ini" extension are processed during a search operation. All other files are filtered (= excluded) from the search operation.

- Exclusive

  All the files matching a filter text are excluded from the search operation. Example: If you specify the filter text "*.ini", all files with the ".ini" extension are filtered, i.e. excluded from the search operation.

Filter List

The filter list contains all the filter texts set up for files. Each filter text can be enabled or disabled via its checkbox. Click on the button *File Filters* at the toolbar to open a menu to add new filters. Right-click an item at the filter list to edit or remove a filter.

Filter Texts

Comparisons using the filter text are always done using the file name. When a filter text contains a backslash (\) comparison is made with the entire path of the current file. Filters are not case-sensitive, meaning no distinction is made between uppercasing and lowercasing when performing comparisons. The filter text may contain various wildcards and Windows environment variables. You can specify multiple file filters using the special character '|' as a separator.

Examples:

- *.txt

- temp.*
- *temp.txt
- temp??.*
- temp.00?
- %USERNAME%.txt
- *\Temp*.tmp
- C:\Temp*.ini
- C:\Temp\%USERNAME%.*
- *.bmp|*.jpg|*.jpeg|*.png

Options

Ignore wildcards in filter text (treat like normal text)

This causes the characters of wildcards in a filter text to be treated as normal text.

Make filtering case-sensitive

This makes filtering distinguish between uppercasing and lowercasing when comparing file names.

File Properties

Ignore 0-Byte files

This option enables to ignore files with a size of 0 bytes.

Exclude files by size

This option enables you to exclude files on the basis of the size.

Exclude files by date

This option enables you to exclude files on the basis of the created/modified date.

Folder Filters

Folder filters enable you to filter specific folders during a search operation, i.e. exclude them from the search operation.

Filter Method

The filtering methods *inclusive* and *exclusive* enable you to determine how filter texts are to be applied during a search operation.

- Inclusive

  Only folders matching an activated filter text are included during a search operation. Example: If you specify the filter text "Test" only folders named 'Test' are searched during a search operation. All other folders are filtered (= excluded) from the copy operation.

- Exclusive

  All the folders matching a filter text are excluded from the search operation. Example: If you specify the filter text "Test", all folders named 'Test' and their subfolders are filtered, i.e. excluded from the search operation.

Filter List

The filter list contains all the filter texts set up for folders. Each filter text can be enabled or disabled for a copy operation via its checkbox. Click on the button *Folder Filters* at the toolbar to open a menu to add new filters. Right-click an item at the filter list to edit or remove a filter.

Filter Texts

Comparisons using a filter text are always done using the folder name. When a filter text contains a backslash (\) comparison is made with the entire path of the current folder. Filters are not case-sensitive, meaning no distinction is made between uppercasing and lowercasing when during comparisons. The filter text may contain various wildcards and Windows environment variables. You can specify multiple folder filters using the special character '|' as a separator.

Examples:

- C:\Windows
- C:\Prog*

- temp??
- C:\users\%USERNAME%
- C:\Windows|C:\Users|C:\Temp

Options

Ignore wildcards in filter text (treat like normal text)

This causes the characters of wildcards in a filter text to be treated as normal text.

Make filtering case-sensitive

This makes filtering distinguish between uppercasing and lowercasing when comparing folder names.

Don't filter subfolders

This option doesn't have any effect unless you are using the *inclusive* filter method and filter the entire path. Then all subfolders are taken into consideration during a search operation and aren't excluded.

Windows Environment Variables

Windows environment variables can be used at the file and folder filters.

Syntax: %Environment Variable%

If 'C:\Backup\%USERNAME%' is specified, the environment variable '%USERNAME%' is replaced with the name of the logged-in user: 'C:\Backup\John'

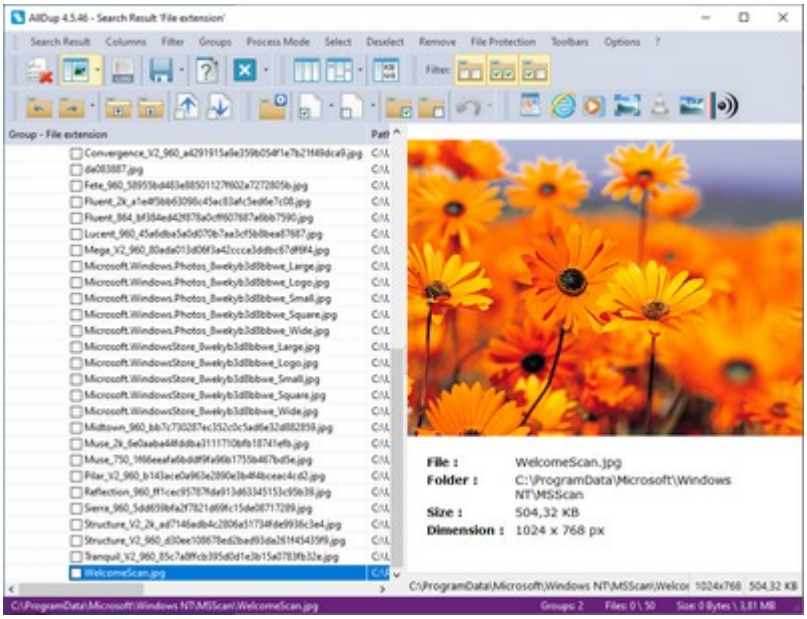
Examples

ENVIRONMENT VARIABLE	EXAMPLE
%ALLUSERSPROFILE%	C:\ProgramData
%APPDATA%	C:\Users\John\AppData\Roaming
%CommonProgramFiles%	C:\Program Files (x86)\Common Files
%CommonProgramFiles(x86)%	C:\Program Files (x86)\Common Files
%CommonProgramW6432%	C:\Program Files\Common Files
%COMPUTERNAME%	WORK-PC
%HOMEDRIVE%	C:
%HOMEPATH%	\Users\John
%LOCALAPPDATA%	C:\Users\John\AppData\Local
%ProgramData%	C:\ProgramData
%ProgramFiles%	C:\Program Files (x86)
%ProgramFiles(x86)%	C:\Program Files (x86)
%ProgramW6432%	C:\Program Files
%PUBLIC%	C:\Users\Public
%SystemDrive%	C:
%SystemRoot%	C:\Windows

ENVIRONMENT VARIABLE	EXAMPLE
%TEMP%	C:\Users\John\AppData\Local\Temp
%TMP%	C:\Users\John\AppData\Local\Temp
%USERNAME%	John
%USERPROFILE%	C:\Users\John
%windir%	C:\Windows

File Preview

The file preview allows you to display different file types directly in the search result:



The file preview can be shown and hidden via the toolbar or menu bar.

Plugin lists

The file extensions at a Plugin list can be selected or unselected by clicking on the checkbox in front of them. Using the right mouse button at a Plugin list will show up a context menu with the following commands:

- Add
  Adds a new file extension to the Plugin list.
- Remove
  Removes a file extension from the Plugin list.
- Select all
  Selects all file extensions at the Plugin list.
- Deselect all
  Deselects all file extensions at the Plugin list.
- Default values
  Clears the list and adds the default file extensions for this Plugin to the list.

Plugin's

- Windows WordPad
- Windows Internet Explorer
- Image Viewer
- VLC Media Player
- Windows Media Player
- EXIF Viewer
- Media Info Viewer

Plugin: Windows WordPad

With this Plugin you can view all files at the file preview pane that are supported by Microsoft WordPad or any file with text content inside. For example, files with the following extensions can be viewed with this Plugin:

TXT, BAT, INI, LOG, CFG, DIZ, NFO, CSS, ASP, PHP, RTF, WRI, XML, INF, URL, REG, LST, EML, ERR, CSV, 1ST, VBS, ...

Plugin: Windows Internet Explorer

With this Plugin you can view all files at the file preview pane that are supported by the Windows Internet Explorer. This Plugin requires an existing installation of the Windows Internet Explorer. For example, files with the following extensions can be viewed with this Plugin at the file preview pane:

BMP, CAB, DIB, EMF, GIF, ICO, PNG, BMP, JPEG, JPG, HTM, HTML, PDF[1], DOC[2], DOCX[2], XLS[2], XLSX[2], PPT[2], PPS[2], SVG, SWF, TXT, WMF and ZIP

[1] requires the installation of a PDF Reader
[2] requires the installation of Microsoft Office

Plugin: Image Viewer

With this Plugin you can view all image files with the following extensions at the file preview pane:

3FR, ARW, BMP, CR2, CRW, CUT, DCR, DIB, DNG, EMF, ERF, GIF, HDP, HEIC[1], HEIF[1], ICO, IFF, J2C, J2K, JP2, JPE, JPG, JPEG, JPX, JFIF, KDC, MDC, MEF, MOS, MRW, NEF, ORF, PEF, PBM, PCX, PGM, PNG, PPM, PSD, RAF, RAS, RAW, RW2, SRW, TGA, TIF, TIFF, RAS, RLE, WBMP, WEBP, WMF and X3F.

[1] An HEIC/HEIF image extension (e.g. CopyTrans HEIC) must be installed for these file types if the files cannot be displayed as a preview or thumbnail using Windows Explorer.

Plugin: VLC Media Player

With this Plugin you can view all audio and video files that are supported by the VLC Media Player at the file preview pane. For example, files with the following extensions can be viewed with this Plugin at the file preview pane:

3G2, 3GA, 3GP, 3GP2, 3GPP, 669, A52, AAC, AC3, ADT, ADTS, AU, AIF, AIFC, AIFF, AMR, AMV, AOB, APE, ASF, ASX, AU, AVI, BIK, CAF, DIVX, DRC, DTS, DV, DVR-MS, EVO, F4V, FLAC, FLV, GVI, GXF, IT, M1V, M2T, M2TS, M2V, M4A, M4P, M4V, MID, MKA, MKV, MLP, MOD, MOV, MP1, MP2, MP2V, MP3, MP4, MP4V, MPA, MPC, MPE, MPEG, MPEG1, MPEG2, MPEG4, MPG, MPGA, MPV2, MTS, MTV, MXF, NSV, NUV, OGA, OGG, OGM, OGV, OGX, OMA, OPUS, QCP, RA, REC, RM, RMI, RMVB, RPL, S3M, SDP, SND, SPX, THP, TOD, TP, TS, TTA, TTS, VOB, VOC, VQF, VRO, W64, WAV, WEBM, WMA, WMV, WTV, WV, XA, XESC and XM.

This Plugin requires the 32-bit version of the freeware VLC Media Player version 3 or higher. The 32-bit version of the VLC Media Player must be either installed at your Windows system, available as a portable edition on your Windows system or manually integrated into AllDup's installation folder.

Using the portable edition of the VLC Media Player:

Register the file *axvlc.dll* from inside the folder of the VLC Media Player at your Windows system using the following command: regsvr32.exe axvlc.dll

Manual integration of the VLC Media Player:

1. Open the FTP archive at the official website of the VLC Media Player.
2. Scroll down to the end of the FTP archive, click on the folder with the latest version number (e.g. "3.0.16") and then click on the folder "32bit".
3. Download the file with the "zip" extension (e.g. "vlc-3.0.16-win32.zip").
4. Extract the following files and folders from the ZIP file into the folder of AllDup:
    - files: axvlc.dll, libvlc.dll, libvlccore.dll
    - folder: plugins
5. Run AllDup with admin rights once to register the file 'axvlc.dll' at your Windows system automatically or register the file 'axvlc.dll' at your Windows system manually using the command: regsvr32.exe axvlc.dll

Plugin: Windows Media Player

With this Plugin you can view all audio and video files at the file preview pane that are supported by the Windows Media Player. This Plugin requires the installation of the Windows Media Player. For example, files with the following extensions can be viewed with this Plugin at the file preview pane:

AU, AIF, AIFC, AIFF, ASF, AVI, M1V, MID, MIDI, MOV, MP4, MP3, MPEG, MPG, MP2, MPA, MPE, RMI, SND, WAV, WM, WMA, WMV, ...

Plugin: EXIF Viewer

With this Plugin you can view the EXIF data of files with the following extensions at the file preview pane: JPEG, JPG, TIF, TIFF, PNG, GIF und WAV. You can activate the Plugin at the toolbar 'File Preview' using the button 'EXIF Viewer'.

Plugin: Media Info Viewer

With the Plugin MediaInfo you can view technical information about media files, as well as tag information for many audio and video files. You can activate the Plugin at the toolbar 'File Preview' using the button 'Media Info Viewer'.

Profiles

Profiles enables you to save your search settings (e.g. source folders, search method, etc.) into a file and load these settings when needed. The profile list shows you all available profile files. The standard profile is automatically loaded when starting AllDup. All settings at the main window will be saved to the standard profile when quitting AllDup.

Create a new profile

When creating a new profile all settings such as source folders and search method will be saved to the new profile.

Context menu

A right-click on a profile enables you to load, save, rename or delete profiles.

Load a profile

Double-click a profile at the list to load it or use the right-click context menu action *Load profile*. The name of the loaded profile will be shown at the window title.

Save a profile

Use the right-click context menu action *Save profile* to save the current search settings into the selected profile. You have to load a profile and using the file manager to save the settings of the file manager into the profile.

Rename profile

Use the right-click context menu action *Rename profile* to rename a profile.

Delete profile

Use the right-click context menu action *Delete profile* to delete a profile.

Options

Don't import any source folders when loading a profile

This option enables you to prevent the loading of the stored source folders from a profile.

Stored Search Results

Here you will get a list of all stored search results. You can load a search result by double-clicking. Right-clicking on a search result gives you a menu to load or delete it.

Options

General

Add AllDup to the context menu of the Windows Explorer

This option displays AllDup in the Windows Explorer context menu for folders. This allows you to right-click on one or more folders to start a search. The following additional options can be selected:

- Context menu with Unicode support

  With this option, folders containing Unicode characters in their names can be passed to AllDup and searched through. This is the default option used by AllDup.

- Context menu without Unicode support

  With this option, no folders containing Unicode characters in their names can be passed to AllDup and searched. Use this option if your window system should not display a context menu in Windows Explorer with the first option. This option is not available on Windows 11.

If required, you can use the 'Register' button to register the context menu on your Windows system if it is not displayed in the Windows Explorer context menu.

Unicode-Text Support

This option correctly displays Unicode characters from languages such as Chinese, Japanese, Korean, or Russian in the search result.

File Date Display Format

Here you can specify the format in which a file date should be displayed in the search result.

Application data folder

The folder in which the AllDup application data is saved is displayed here.

Folder for temporary files

At this folder AllDup will extract files from archives or create files necessary for the file preview. All temporary files that have been created after the search for duplicate files was started will be automatically deleted after closing the search result.

Exclude from scanning by Windows Defender

If you use Windows Defender as an active virus scanner under Windows 10/11, you can add file types or folders to its exclusion list and thus increase the speed of AllDup. The excluded file types and folders are then no longer checked by Windows Defender, which means that AllDup can examine this data more quickly and does not have to wait for each file until Windows Defender has completed its check.

- We recommend that you exclude the storage location of the application data from AllDup so that there are no delays caused by Windows Defender when accessing the work data.
- If you always compare many image files, then you should exclude the different file types of the images or the entire folder that contains the image files.

User Interface

Here you can set the font and background color of the AllDup user interface.

Log

Delete entries from log file when they are more than ...

This option causes entries to be automatically removed from the log file after a specified number of days.

Search Result

External program for comparing the contents of two files:

This option enables you to specify an external file comparison utility to be used with two highlighted files at the search result. Right-click two highlighted files at the search result and use the command '*Compare highlighted files*'. The two highlighted files from the search result have to be specified via the wildcards %1 and %2. Example: C:\Tools\Windiff.exe %1 %2

%1 = "C:\Data\db.txt"
%2 = "X:\Backup\abc.txt"
%3 = C:\Data
%4 = X:\Backup
%5 = db.txt

%6 = abc.txt

Compare these file types using Microsoft Word:

This option enables you to specify various file extensions that will be opened with the compare function of Microsoft Word. Each of the file extensions has to be separated by a comma.
Example: doc, docx, rtf

External Program to open a folder

This option enables you to specify an external program to be used to open a folder.
Example: explorer.exe "%1"
The placeholder %1 will be replaced with file path & file name and the placeholder %2 with the file path only:
%1 = "C:\Data\db.txt"
%2 = "C:\Data\

External Program to open with file(s)

This option enables you to specify an external program to be used to open with all highlighted files.
Example: C:\texteditor.exe %1
The placeholder %1 with be replaced with all highlighted files: "file1" "file2" ...

AllDup Internet-Update

AllDup's Update Wizard enables you to check whether a new version of AllDup is available for download and to install it, if necessary.

Version

Clicking on the 'Check' button causes a check to see whether a new version is available. Clicking on 'Download' causes the new version to be downloaded and installed. Information about a new version is displayed at the log window.

Options

Automatically check for new version

This option causes a check to automatically be conducted for a new version of AllDup on the AllDup website every time you open the Internet-Update dialog.

Show Setup dialog when installing an update

Not activating this option cause updating to take place in the background, without any dialog being popped up.

Download Folder

Here you can specify the folder in which the update file for the new version should be saved

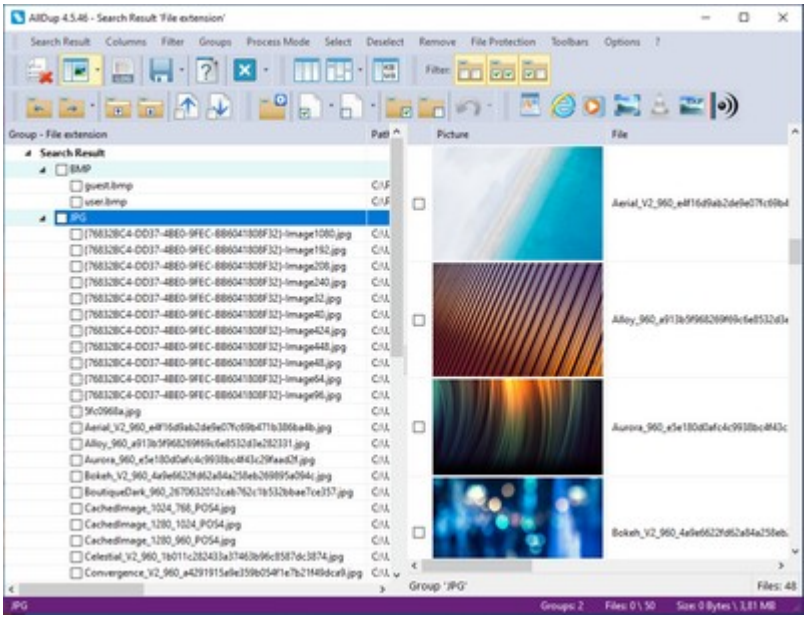
Proxy

If necessary, you can specify the access data for your proxy server here.

Data Privacy

When checking for a new version, only a text file containing information is downloaded from our website and evaluated. No private data on your computer is transmitted via the Internet.

Search Result



Groups

All duplicate files will be sorted into groups and displayed at the search result upon completion of the search. Each group contain files that all match together by the search method you have chosen. Each group has one reference file displayed with different text color. All other files inside the group are duplicates of the reference file.

Sorting groups and files

The content of the search result can be sorted by clicking with the left or right mouse button on a column header. Clicking with the left mouse button on a column header will sort only the group names but not the content of the groups. Clicking with the right mouse button on a column header will sort the files inside every group.

Select files

All files at the search result can be selected or unselected by clicking the checkbox next to the file name. You also can use the automatic selection commands at the Menu bar or Toolbar.

Highlight files or groups

You can highlight multiple files or groups by holding down the CTRL key and clicking on the files you would like to highlight. Clicking with the right mouse button on the highlighted files or groups

will open a context menu with several commands.

Delete, copy, move or rename files

Open the File Manager via the toolbar or menu bar to process all selected files from the search result. You also can delete, copy or move files without using the file manager by holding the CTRL key and clicking with the right mouse button on a file.

Mouse commands

- Clicking with the right mouse button on a group or file will open context menu with several commands.
- Holding the CTRL key and clicking with the right mouse button on a file will open a context menu with several file commands.
- Clicking with the middle mouse button on a file will show the Windows explorer context menu for this file.
- A double-click on a file name opens the file with the associated application.
- A double-click on a file path opens the file path with the Windows explorer.

Keyboard Shortcuts

The following keyboard shortcuts are available:

- With the space bar you can select or unselect a highlighted file or group.
- The F2 key enables you to rename a highlighted file.
- The DEL key enables you to remove all highlighted groups and files from the search result.
- Holding the CTRL key and pressing the DEL key will delete a highlighted file.

You can create your own keyboard shortcuts for all the commands at the menu bar, toolbar or context menus by using the option Hot Keys at the menu bar.

Menu Bar / Toolbar

- File
- Columns
- Filter
- Groups
- Mode
- Select
- Deselect
- Remove
- File Protection
- Toolbars
- Options

Hint: The toolbar context menu (right-click) enables you to hide or show buttons.

File

- File Manager - Delete, copy, move or rename selected files.
- Save search result
- Save as ...
- Export search result
- Print search result
- Log
- Save and close search result
- Save search result and exit AllDup
- Close search result
- Exit AllDup

Columns

Here you can show, hide or resize the columns at the search result.

- Show column 'Path'
- Show column 'Archive Path'

- Show column 'Size'
- Show column 'Last Modified Date'
- Show column 'Creation Date'
- Show column 'Attributes'
- Show column 'Owner'
- Show column 'Hard Links'
- Show column 'Hard Link ID'
- Show column 'Match'
- Show column 'Width'
- Show column 'Height'
- Show column 'Duration'
- Show column 'Bit rate'
- Show column 'Sample rate'
- Optimize column width
  Optimizes the width of all columns considering all visible rows in the search result.
- Automatically optimize column width
  With this option, the column width is automatically optimized when opening and closing groups.
- Optimize column width of all rows (slower)
  With this option, the contents of all rows in the search result are taken into account when optimizing the column width.
- Ignore column header when optimizing column width

Filter

With the 'Display filter' you can specify which groups should be displayed in the search result. The following filters are available:

- Show groups with no files selected
- Show groups with all files selected
- Show groups with some files selected

Groups

You can expand or collapse specific groups with the following actions:

- Collapse all groups
- Expand all groups
- Expand only groups with selected files
- Expand only groups without selected files
- Only expand groups where all files are selected
- Expand only groups with at least 2 unselected files
- Expand only groups with more than a certain number of files...
- Expand only groups that contain files with different names
- Expand only groups that contain files with different names (without file extension)

Mode

The 'Process mode' defines which groups are affected by the actions of the menu items 'Select', 'Deselect' and 'Remove'. One of the following options can be selected:

- All groups
- Expanded groups
- Collapsed groups
- Groups without selected files
- Groups with all files selected
- Groups with some selected files
- Highlighted groups
- Non-highlighted groups

Select

You can use the following actions to select specific files in the search result:

- Select all files
- Highlight all files
- Select all files located within the following folder...
- Select all files which are duplicates of files from the folder...
- Select all files except the first file in each group
- Select all files except the last file in each group
- Select all files except the newest file in each group
- Select all files except the oldest file in each group

- Select only the first file in all groups
- Select only the last file in all groups
- Select all files except the smallest file in each group
- Select all files except the largest file in each group
- Select all files except the file with the shortest name in each group
- Select all files except the file with the longest name in each group
- Select all files except the file with the shortest path in each group
- Select all files except the file with the longest path in each group
- Select files by name
- Select files by path
- Select files by size
- Select files by date
- Select all files with a match greater than or equal to a specified percentage in each group
- Select all files with a match less than or equal to a specified percentage in each group
- Select all files except the image file with the most megapixels in each group
- Select all files without hard links
- Select all corrupted image files
  This selects all image files for which an error occurs when loading. In addition, all files with their error message are listed in the log.
- Select all corrupted audio files
  This selects all audio files for which the duration, bit rate or sampling rate properties have an incorrect value. In addition, all files are listed with a note in the log. Files with the following extensions are checked for errors: aac, aiff, m4a, mp3, ogg, wav, wma
- Invert file selection
- Undo
  Here you can undo the last selection or deselection action. Please note that when removing files from the search result, the list with all performed actions will be deleted!

Deselect

You can deselect specific files in the search result with the following actions:

- Deselect all files
- Deselect all files located within the following folder...
- Deselect all files which are duplicates of files from the folder...

- Deselect files by name
- Deselect files by path
- Deselect files by size
- Deselect files by date

Remove

You can remove specific groups or files from the search result with the following actions:

- Remove all groups with a certain number of files from the search result...
- Remove all groups where the files in a group do not exist in all source folders
- Remove all groups with all files selected
- Remove all groups with some files selected
- Remove all groups that contain only files stored in archives
- Remove all hard links from the search result
- Remove all groups that only contain hard links
- Remove all groups that only contain hard links with the same ID
- Remove all files within the folder structure of the following folder from the search result...
- Remove all files that no longer exist from the search result
- Remove all selected files from the search result

File protection

Here you can switch file protection on and off for each source folder. File protection prevents files from being deleted, moved or renamed within the source folder.

Toolbars

Here you can show and hide the various toolbars.

- Toolbar 'Files'
- Toolbar 'Filter'
- Toolbar 'Groups'
- Toolbar 'Search'
- Toolbar 'Select'
- Hide all toolbars

- Use large icons

Options

- Hot Keys
- Confirm file deletion
  With this option you have to confirm the deletion of files in the search result
- When exiting, ask whether the search result should be saved
- Show minimized search result in the notification area of the taskbar
- Show file info icons
  This option displays different icons for hard links and files from archives in the leftmost part of the search result. This gives you a quick overview of whether a file is a hard link or whether the file is stored in an archive file.
- Change the font of the search result
- Decrease font size
- Increase font size
- Maximum size of the thumbnails in pixels
  Here you can set the maximum width of the images in the group preview.
- Show all file properties in a single column
  This option displays all file properties in the group preview, one below the other in a single column

Context Menu

Various actions can be accessed during context menus at the search result:

File

This context menu will be shown when you right-click a file at a group.
Hint: Doing a right-click on a file while pressing the CTRL key will show only the submenu with the file actions.

- Select/Deselect file
- File actions:
  - Open
    Open the file with the associated application.
  - Open file with ...
  - Open file location
    Opens the folder of the file with the Windows explorer or a user-specified external program
  - Open file with the external program
  - Copy file to ...
  - Move file to ...
  - Rename file
  - Delete file permanently
    Deletes the file permanently from the data storage.
  - Move file to the Windows Recycle Bin
  - Show file properties
- Remove file from the search result
- Move to the top of the group
  This command enables you to specify the source file to create hard links if needed.
- Select all other files at this group
- Select all files with the same path
- Select all files inside the folder structure of this file
- Deselect all files with the same path
- Deselect all files inside the folder structure of this file
- Delete all other files from this group permanently

- Move all other files of this group to the Windows Recycle Bin
- Filter lists:
  - Add file name to the file filter
  - Add file path to the folder filter
- Add file extension to the Plugin list
  Enables you to add the file extension to the Plugin list "Microsoft WordPad", "Windows Internet Explorer", "Windows Media Player" or "VLC Media Player"
- Remove file extension from the Plugin lists
- Copy to the clipboard
- Windows Explorer System Menu
  Opens the Windows explorer context menu for this file.

Highlighted Files

You can highlight multiple files by pressing the CTRL key and clicking on each file. Click the highlighted files with the right mouse button to show up this context menu:

- Select highlighted files
- Deselect highlighted files
- Compare highlighted files
- Open highlighted files with external program
- Switch file names
- Copy highlighted files
- Move highlighted files
- Delete highlighted files permanently
- Remove highlighted files from the search result
- Copy to the clipboard

Groups

- Select/Deselect Group
- Reverse file selection
- Remove selected group(s)
  Removes the selected group(s) from the search result.
- Open all files from inside the group with external program

File Manager

The file manager enables you to delete, copy, move or rename the selected files from the search result.

Which groups should be processed?

- All groups (ignore filter)
- Only groups displayed by the filter

Don't process any groups with all files selected

This option ensures that not all files in a group are deleted.

What action is to be performed?

Actions 2, 3, 4 and 5 do not affect selected files located in an archive file (Zip, Rar, etc.).

1. Delete files

   This action deletes the selected files on the storage medium and frees up storage space. If you delete files from archives and the file to be deleted is the only file in the archive, then the archive file is always deleted. Deleting files from an archive with multiple files inside is only possible with Zip- or 7z-archives. Deleting files from archives that contain multiple files is only possible for archives with the extension '.zip' and '.7z'.
   With the 'Secure delete' option, the file content is completely overwritten with zeros before deletion and the file size is set to 0.

2. Move local files to the Windows Recycle Bin

With this action, the selected files are moved to the Windows recycle bin. An error message is displayed if there is no Windows Recycle Bin on the data carrier of the file to be deleted. With the option 'Delete file if there is no recycle bin' no error message is displayed and the file is deleted.
Important notes:

- Make sure that the Windows Recycle Bin is activated on the partition of the selected files.
- The available disk space for the Windows Recycle Bin should be set to 100%.
- Files that are located on the data medium of another computer are not moved to the Windows Recycle Bin; they are deleted!
- Files stored in archives cannot be moved to the Windows Recycle Bin.

3. Copy files to a folder

This action allows you to copy the selected files to a folder.

4. Move files to a folder

This action allows you to move the selected files to a folder.

5. Rename files

This action allows you to rename the selected files. Please note that the following characters cannot be used in a file name under Windows: \ / : * ? < > | "
The following placeholders can be used for the new name:

PLACEHOLDER	DESCRIPTION
%NAME%	File name without file extension
%EXT%	File extension with leading dot (.txt)
%GNAME%	Name[1] of the group in which the file is located
%FNAME%	Name of the first file in the group
%LNAME%	Name of the last file in the group
%CDATE%	File creation date[1]. The displayed creation date from the search result is used.
%MDATE%	File modified date[1]. The displayed modified date from the search result is used.

PLACEHOLDER	DESCRIPTION
%PDATE%	Picture creation date[1] (JPG, TIF, PNG). For this purpose, the Exif property 'DateTimeOriginal' is read out, which is in the following format: "YYYY:MM:DD HH:MM:SS". The creation date of the file is used if no creation date could be found in the Exif data.
%YYYY%	Year (4-digit)
%YY%	Year (2-digit)
%MM%	Month (2-digit)
%DD%	Day (2-digit)
%HH%	Hour (2-digit)
%NN	Minute (2-digit)
%SS%	Second (2-digit)

[1] Characters that are not allowed in a file name are automatically replaced with an underscore (_).

Show file protection note

This option shows a warning message before the selected files will be deleted, moved or renamed.

Backup Folder

Here you specify the folder to which the files should be copied or moved.

Create subfolders in the backup folder

This option allows you to create additional subfolders within the folder. Various Date and Time placeholders and Windows environment variables can be used to create a new folder name. Please note that normal text must be enclosed in quotation marks when using date and time placeholders. See examples:

Text: "Backup of" %USERNAME% "on" yyyy-mm-dd "at" hh_nn_ss
Folder: Backup of John on 2011-02-26 at 10_15_00

Text: "%USERNAME%\"YYYY-MM-DD HH-NN-SS
Folders: John\2011-02-26 10-15-00

Save files with their folder structure in the backup folder

This option saves all files with their folder structure in the specified folder. If you deactivate the option, all files will be saved directly in the specified folder without their folder structure. Existing files are renamed before being overwritten by appending a consecutive number after the file name. For example, the 'Data.txt' file is renamed to 'Data-001.txt' before being overwritten.

Options

Create Shortcuts

This option enables you to create a shortcut (.lnk) at the place of all files that will be deleted or removed. The shortcut will be point to the **first file that is not selected** at the same group; see Example for Shortcuts.

Create Hard Links

This option allows all selected files in a group to be linked together by replacing the files with a hard link. This has the advantage that the content of all linked files is only saved once on the hard disk and storage space can be saved. For example, if you link 1000 files with the same content and a size of 10 MB per file, then more than 9 GB of disk space is freed up! See Example for hard links.

Notes

- Only files stored on the same volume can be linked together.
- The files must be stored on a local NTFS partition.
- Hard links cannot be created on a network drive.
- Hard links cannot be created in a virtual folder that points to the data from an external source, such as local delivery of files from a cloud.
- At least 2 files have to be selected in a group to create hard links.
- The Windows file system has a limit of 1024 hard links on a file.
- AllDup automatically determine a source file with a hard link count lower than 1024 of all selected files in a group. All other selected files in this group will be linked with this source file.

- A new source file will be determined as soon as the current source file reaches 1024 hard links. This allows you to create an unlimited number of hard links for each group.
- The file context menu command '*Move to the top of the group*' enables you to specify the source file to create hard links if needed.
- Only files with a hard link count of zero can be linked to the source file. The hard link count will be checked by the value displayed at the column 'Hard links'. You need to activate the search option Determine the hard link count for each file so that the hard link count for each file will be determined during the search.
- Files stored inside an archive will be skipped.

Remove all processed files from the search result

This option removes any processed file from the search result.

Remove all groups with only one file from the search result

With this option all groups with only one file will be removed from the search result.

Don't show cancel dialog if an error occurred

This option causes to continue the selected file action after an error occurred while processing a file.

Delete all folders that are empty after moving or deleting files

This option deletes all empty folders that previously contained files.

Don't log any file actions (faster)

This option disables the logging of the file actions.

After action is completed

- Close file manager
- Exit AllDup

Examples

Create Hard Links

The search result contains a group with the following files:

1. C:\Work\notes.txt
2. C:\User\readme.txt
3. C:\Backup\notes.txt
4. C:\Mail\new-user-readme.txt

All files in this group are selected (?). The first file in the group is automatically used as the source file for creating the hard links. All other files (2-4) are deleted and a hard link is created to the first file, with the hard link having the same name as the deleted file.

Create Shortcuts

The search result contains a group with the following files:

1. C:\Work\notes.txt
2. C:\User\readme.txt
3. C:\Backup\notes.txt
4. C:\Mail\new-user-readme.txt

The first file is unselected and will be used as the source file for the shortcuts to be created. All other files (2-4) in the group are selected (?). The selected files are now deleted one after the other and a shortcut is created to the first file, with the shortcut being given the name of the deleted file.

Hot Keys

Here you can create keyboard shortcuts for all items of the menu bar and tool bar.

Click on a row at the list and press a key to set the shortcut for this item.
Press the DEL key to remove the shortcut of a selected item.
Press CTRL + DEL to delete the shortcuts of all items.

Keys

You can use the following keys to create a shortcut:

- CTRL
- ALT
- SHIFT
- A-Z
- 0-9
- F2-F12
- Num0-Num9
- Backspace
- Enter
- Insert

Shortcut Examples

- CTRL + A
- ALT + 1
- SHIFT + L
- CTRL + ALT + M
- F2
- Enter

Command Line

Syntax

AllDup.exe -s[1-9,a,b,c] -c[0-5] -h[0-9] -f[0-7] -m[1-100] -l[10-999] -a[1,2,4,5] -n -p:"[profile name]" "[Folder1]" "[Folder2]" ....

Parameters

-s[1-9,a]

This parameter enables you to specify the search method:

- 1 = File Name
- 2 = File Extension
- 3 = File Size
- 4 = File Content
- 5 = File Last Modified date
- 6 = File Creation date
- 7 = File Attributes
- 8 = Hard Links
- 9 = Find similar pictures
- a = Find similar music
- b = Find video & audio files on the basis of the audio length
- c = Find similar file names

The file properties 1 to 7 can be combined such as "-s124". The search method 8, 9, a, b and c can only be used alone such as "-s8" or "-sa".

-c[0-5]

This parameter is optionally and can be used in combination with the parameter -s4 to specify the comparison method for the comparison criteria File Content.

0. Byte by byte
1. MD5 (128-Bit)
2. SHA-1 (160-Bit)
3. SHA-2 (256-Bit)

4. SHA-2 (384-Bit)
5. SHA-2 (512-Bit)

-h[0-9]

This parameter is optionally and can be used in combination with the parameter -s9 to specify the comparison method of the search method Similar Pictures.

0. aHash
1. bHash
2. dHash
3. mHash
4. pHash
5. MD5 (128-Bit)
6. SHA-1 (160-Bit)
7. SHA-2 (256-Bit)
8. SHA-2 (384-Bit)
9. SHA-2 (512-Bit)

-f[0-7]

This parameter is optionally and can be used in combination with the parameter -sc to specify the comparison method of the search method Similar File Names.

0. SmartMatch
1. FuzzyMatch
2. Levenshtein
3. Ratcliff
4. MatchDiff
5. WordMatch
6. FuzzyPercent
7. Simil

-m[1-100]

This parameter is optionally and can be used in combination with the parameter -s9 and -sa to specify the percentage match of the search method Similar Pictures and Similar Music.

-d[0-4]

This parameter is optionally and can be used in combination with the parameter -s9 to specify the compare size of the search method Similar Pictures.

0. 8x8 (aHash, dHash, mHash)
1. 16x16 (aHash, dHash, mHash)
2. 128x128 (bHash)
3. 256x256 (bHash)
4. 512x512 (bHash)

-l[10-999]

This parameter is optionally and can be used in combination with the parameter -sa to specify the scan length in seconds of the search method Similar Music.

-a[1,2,4,5]

This parameter is optionally and can be used in combination with the parameter -sa to specify the comparison method of the search method Similar Music.

-p:"[profile name]"

This parameter is optionally and enables you to load a profile.

-n

With this parameter the specified folders will not be added to the source folder list.
This parameter is optionally.

"[Folder]"

This parameter is necessary and enables you to specify the folder(s) to be searched for duplicates. Folder paths that include space(s) have to be enclosed in double-quotes.

Examples

AllDup.exe -s13 "C:\Work"

Search for duplicates with the same file name and file size inside the folder "C:\Work".

AllDup.exe -s9 -h3 -m90 "C:\Pics"

Search for similar pictures inside the folder "C:\Pics" using the compare method pHash and a percentage match of 90%.

AllDup.exe -sa -l25 -a4 -m80 "C:\Audio"

Search for similar music files inside the folder "C:\Audio" using a scan length of 25 seconds with the compare method no.4 and a percentage match of 80%.

AllDup.exe -s4 -c0 "C:\Work" "C:\Data"

Search for duplicates with the same content inside the folders "C:\Work" and "C:\Data".

AllDup.exe -s14 -c0 "C:\Work"

Search for files with the same name and content inside the folder "C:\Work".

AllDup.exe "C:\Work"

Search for duplicates inside the folder "C:\Work" with the current program settings.

AllDup.exe -p:"test" "C:\Work"

Search for duplicates inside the folder "C:\Work" with the settings of the profile "test".

AllDup.exe C:\Work "D:\Data Backup"

Search for duplicates inside the folders "C:\Work" and "D:\Data Backup" with the current program settings.

Wildcards for Text

WILDCARD	DESCRIPTION
*****	No or several characters.
?	Any single character.
#	Any single numeral (0 - 9).
[charlist]	Any single character in *charlist*.
[!charlist]	Any single character that isn't contained in *charlist*.

The wildcards can be combined in any sequence.

The following characters have to be inserted in square brackets in order to be used for a compare operation: left square bracket (**[**), question mark (**?**), pound sign (**#**) and asterisk (*****). The right square bracket (**]**) can't be used in a string of characters being compared. However, it can be indicated outside of a string as an individual character.

You can also specify a range of characters in *charlist* by indicating the largest and smallest value of the range, separated by a hyphen (-). For example, **[A-Z]** results in a match if the respective character position in *charlist* is a letter between **A** and **Z**. You can specify a sequence of several ranges in square brackets without using separators.

Other key rules for using wildcards:

- An exclamation point (**!**) at the beginning of *charlist* means that a match results when any character except for the characters in *charlist* is found. If the exclamation point is used outside of the square brackets it serves as a wildcard for itself.
- A hyphen (**-**) can appear at the beginning (after an exclamation point, if present) or at the end of *charlist* in order to serve as a wildcard for itself. In any other position a hyphen serves to designate a character range.
- When a range of characters is specified, the characters have to be listed in ascending order (from the lowest to the highest). This means that **[A-Z]** is a permissible pattern whereas **[Z-A]** isn't.

Examples:

TYPE OF CORRESPONDENCE	TEXT	CORRESPONDENCE	NO CORRESPONDENCE
Several characters	**a*a**	aa, aBa, aBBBa	aBC
	ab	abc, AABB, Xab	aZb, bac
[? # *	**a[*]a**	a*a	aaa
Several characters	**ab***	abcdefg, abc	cab, aab
Individual characters	**a?a**	aaa, a3a, aBa	aBBBa
Individual numerals	**a#a**	a0a, a1a, a2a	aaa, a10a
Character range	**[a-z]**	f, p, j	2, &
Outside of range	**[!a-z]**	9, &, %	b, a
No numerals	**[!0-9]**	A, a, &, ~	0, 1, 9
Combination	**a[!b-m]#**	An9, az0, a99	abc, aj0

Placeholders for the Date and Time

PLACEHOLDER	DESCRIPTION
:	Time delimiter
/	Date delimiter
d, dd	Day (1 31, 01 31)
Ddd	Abbreviated day of the week (Sun - Sat)
dddd	Day of the week (Sunday - Saturday)
ddddd	Short date format
dddddd	Long date format
w	Calendar week day (1 for Sunday to 7 for Saturday)
ww	Calendar week (1 54)
m, mm	Month (1 - 12, 01 12)
mmm	Abbreviated names of the months (Jan - Dec)
mmmm	Names of the months (January - December)
q	Quarter (1 4)
y	Calendar day (1 366)
yy, yyyy	Year (00 99, 100 - 9999)
h, hh	Time/hour (0 - 23, 00 - 23)
m, mm, n, nn	Time/minute (0 - 59, 00 - 59)
s, ss	Time/second (0 - 59, 00 - 59)
AM/PM, A/P, AMPM	12-hour format

Speed Comparison Test

Here you will get information about a speed comparison between the comparison method *Byte by Byte* and *SHA-1*. The additional options "*Ignore Exif metadata of JPEG files*" and "*Log every x minute the search statistic of the scan progress info*" where activated for each scan.

The files of the scanned folder were stored on an external hard disk connected via USB2 and encrypted with TrueCrypt. AllDup was installed at a computer running Windows 7 x64 with 8 GB RAM and an i3 CPU.

Test with the comparison method *Byte by Byte*:

```
13:29:36 - Search: File content Byte by Byte
13:29:37 - File Count: 45442
13:29:37 - Scan: R:\!P2
13:33:37 - Duration : 0:04:01, Progress : 7 %, Current File : 3361 \ 45442, Duplicates Found : 1
13:37:39 - Duration : 0:08:03, Progress : 16 %, Current File : 7652 \ 45442, Duplicates Found :
13:41:39 - Duration : 0:12:03, Progress : 45 %, Current File : 20806 \ 45442, Duplicates Found
13:45:39 - Duration : 0:16:03, Progress : 57 %, Current File : 26252 \ 45442, Duplicates Found
13:49:39 - Duration : 0:20:03, Progress : 65 %, Current File : 29665 \ 45442, Duplicates Found
13:53:39 - Duration : 0:24:03, Progress : 70 %, Current File : 32144 \ 45442, Duplicates Found
13:57:39 - Duration : 0:28:03, Progress : 76 %, Current File : 34663 \ 45442, Duplicates Found
14:01:39 - Duration : 0:32:03, Progress : 82 %, Current File : 37573 \ 45442, Duplicates Found
14:04:51 - Found 32215 duplicates with 22.970.559.143 Bytes in source folder 'R:\!P2'
14:04:51 - Groups: 5.442
14:04:51 - File Comparison Count: 28.370
14:04:51 - Duplicates: 32215 (70%) (21,39 GB)
14:04:51 - Elapsed time: 00:35:15
```

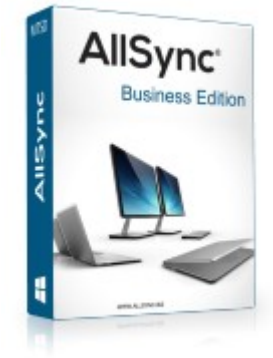
Test with the comparison method *SHA-1*:

```
14:10:31 - Search: File content SHA-1 (160-Bit)
14:10:32 - File Count: 45442
14:10:32 - Scan: R:\!P2
14:14:32 - Duration : 0:04:01, Progress : 7 %, Current File : 3422 \ 45442, Duplicates Found : 1
14:18:32 - Duration : 0:08:01, Progress : 26 %, Current File : 12073 \ 45442, Duplicates Found
14:22:32 - Duration : 0:12:01, Progress : 55 %, Current File : 25020 \ 45442, Duplicates Found
14:26:32 - Duration : 0:16:01, Progress : 66 %, Current File : 30193 \ 45442, Duplicates Found
14:30:32 - Duration : 0:20:01, Progress : 78 %, Current File : 35462 \ 45442, Duplicates Found
14:34:12 - Found 32215 duplicates with 22.970.559.143 Bytes in source folder 'R:\!P2'
14:34:12 - Groups: 5.442
14:34:12 - File Comparison Count: 28.370
14:34:12 - Duplicates: 32215 (70%) (21,39 GB)
14:34:12 - Elapsed time: 00:23:41
```

As expected, the comparison method *SHA-1* wins the rally. Comparing only the checksums stored inside the RAM reduced the file read access and can save a lot of time.

AllSync

Data Backup & Folder Synchronization



AllSync is the professional solution for your data synchronization, imaging, backup, update, replication and archiving needs under Microsoft Windows.

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