

NAME

wimlib-imagex-update – Update a WIM image

SYNOPSIS

wimlib-imagex update *WIMFILE* [*IMAGE*] [*OPTION...*] [< *CMDFILE*]

DESCRIPTION

wimlib-imagex update modifies the specified *IMAGE* in the Windows Imaging (WIM) file *WIMFILE* by adding, deleting, or renaming files or directories in it.

IMAGE specifies the image in *WIMFILE* to update. It may be a 1-based index of an image in the WIM or the name of an image in the WIM. Use the **wimlib-imagex info** (1) command to list the images a WIM file contains. *IMAGE* may be omitted if *WIMFILE* contains only one image.

The modifications to perform on the WIM image are specified as a sequence of commands, one per line, read in a text file from standard input. It is recommended that standard input be redirected from a file (*CMDFILE*), as shown above, rather than typing in commands interactively. Alternatively, to specify a command directly on the command line, see the **--command** option.

AVAILABLE COMMANDS

This section documents the commands that may appear in the *CMDFILE* described above.

add [*OPTION...*] *SOURCE DESTINATION*

Add a file or directory tree to the WIM image. *SOURCE* must specify the path to a file or directory on your filesystem. *DESTINATION* must specify the path inside the WIM image at which to add the file or directory tree. If *DESTINATION* already exists in the WIM image, then an overlay is attempted if it is a directory; this feature can be used to add multiple files to an existing directory in the WIM image in one command. If *DESTINATION* does not exist in the WIM image, then any prerequisite directories are created as needed to add the *SOURCE* at that location.

The available options for the **add** command are:

--verbose

Print the names of files as they are captured.

--dereference

(UNIX only) Follow symbolic links and archive the files they point to, rather than archiving the links themselves.

--unix-data

(UNIX only) Store the UNIX owner, group, and mode of all captured files. This is done by adding a special alternate data stream to each directory entry that contains this information. Please note that this flag is for convenience only, in case you want to use **wimlib-imagex** to archive files on UNIX. Microsoft's software will not understand this special information.

--no-acls

(Windows only) Do not capture files' security descriptors.

--strict-acls

(Windows only) Fail immediately if the full security descriptor of any file cannot be read. The default behavior without this option is to first try omitting the SACL from the security descriptor, then to try omitting the security descriptor entirely. The purpose of this is to capture as much data as possible without always requiring Administrator privileges. However, if you desire that all security descriptors be captured exactly, you may wish to provide this option, although the Administrator should have permission to read everything anyway.

delete [*OPTION...*] *PATH*

Delete a file or directory tree from the WIM image. *PATH* must specify the path inside the WIM image of the file or directory tree to delete.

The available options for the **delete** command are:

--force

Do not issue an error if the path to delete does not exist.

--recursive

Delete the file or directory tree recursively; if not specified, an error is issued if the path to delete is a directory.

rename *OLD_PATH NEW_PATH*

Rename a file or directory tree inside the WIM image. *OLD_PATH* must specify the old path of the file or directory tree inside the WIM image, and *NEW_PATH* must specify the new path for the file or directory tree. This command follows the semantics of the POSIX **rename** (3) function; in particular, a pre-existing file at *NEW_PATH* will be deleted if present, except in certain cases such as attempting to rename a directory to a non-directory, which is not allowed.

There are no options available for the **rename** command.

OPTIONS

The following options are accepted on the command line by **wimlib-imagex update** itself:

--verbose

Use **--verbose** for all **add** commands.

--dereference

Use **--dereference** for all **add** commands.

--unix-data

Use **--unix-data** for all **add** commands.

--no-acls

Use **--no-acls** for all **add** commands.

--strict-acls

Use **--strict-acls** for all **add** commands.

--config=FILE

Set the capture configuration file for all **add** commands. See the description of this option in **wimlib-imagex-capture** (1).

--force

Use **--force** for all **delete** commands.

--recursive

Use **--recursive** for all **delete** commands.

--check

When reading *WIMFILE*, verify its integrity if the integrity table is present; in addition, include an integrity table in the updated WIM. If this option is not specified, no integrity table is included in the updated WIM, even if there was one in the original WIM.

--threads=NUM_THREADS

Number of threads to use for compressing newly added files. Default: autodetect (number of processors).

--rebuild

Rebuild the entire WIM rather than appending the updated data to the end of it. Rebuilding the WIM is slower, but will save a little bit of space that would otherwise be left as a hole in the WIM. Also see **wimlib-imagex-optimize** (1).

--command=STRING

Instead of reading update commands from standard input, read a single update command directly from the string *STRING* specified on the command line. This option cannot be provided more than one time and cannot be used to specify more than one update command. Note that the *STRING*, as well as any paths containing spaces within the *STRING* must be appropriately quoted. If running from *cmd.exe* on Windows, you should use double quotes for the outer quotes and single quotes for

the inner quotes. Example:

```
wimlib-imagex update boot.wim 1 --command="add 'C:\My Dir' '\My Dir'"
```

NOTES

wimlib-imagex update is partly redundant with **wimlib-imagex mountrw**, since if a WIM image can be mounted read-write, then there theoretically is no need for **wimlib-imagex update**. The main advantage of **wimlib-imagex update** is that it works on both UNIX and Windows, whereas **wimlib-imagex mountrw** only works on UNIX.

Symbolic links inside a WIM image are not dereferenced when being interpreted. So, for example, if you have a WIM image that contains a symbolic link `"/Documents and Settings" -> "/Users"` where `"/Users"` is a directory, then a subdirectory named `"Public"` in this directory must be specified as `"/Users/Public"` rather than `"/Documents and Settings/Public"`.

All paths to files or directories within the WIM image must be specified relative to the root of the image. However, the leading slash is optional, and both forward slashes and backslashes are accepted. In addition, on Windows, the paths are treated case-insensitively, while on UNIX, the paths are treated case-sensitively.

The command file (*CMDFILE*) is parsed by **wimlib-imagex update** itself and not by the system shell. Therefore, its syntax is limited. However, comment lines beginning with `'#'` are allowed, and it is also possible to quote arguments with whitespace inside them.

On UNIX, you cannot use **wimlib-imagex update** to add files to an image directly from a NTFS volume using `libntfs-3g`, even though **wimlib-imagex capture** supports capturing a full image this way.

It is safe to abort an **wimlib-imagex update** command partway through; however, after doing this, it is recommended to run **wimlib-imagex optimize** to remove any data that was appended to the physical WIM file but not yet incorporated into the structure of the WIM, unless **--rebuild** was specified, in which case you should delete the temporary file left over.

EXAMPLES

All the examples below show the update command file to be created as well as the **wimlib-imagex update** command to run to perform the updates.

Delete two files from a WIM image:

```
update_commands.txt:
    delete /setup.exe
    delete /sources/setup.exe

$ wimlib-imagex update boot.wim 2 < update_commands.txt
```

Add some files and directories to a WIM image. Note that the first path of each **add** command specifies the files to add, while the second path of each **add** command specify the locations at which to to add them inside the WIM image:

```
update_commands.txt:
    add somedir /dir
    add somefile /dir/file

$ wimlib-imagex update boot.wim 2 < update_commands.txt
```

Rename a file inside a WIM image.

```
update_commands.txt:
    rename /dir_in_wim/oldfile.txt /dir_in_wim/newfile.txt

$ wimlib-imagex update boot.wim 2 < update_commands.txt
```

Using additional features, such as comments, options, and overlays, and including an integrity table in the updated WIM:

```
update_commands.txt:
```

```
#
# This file specifies some changes to make to a WIM image.
#
# Add a new directory containing files I want in the image.
# The quotes are necessary because the directory name
# contains a space.
add "My Directory" "/My Directory"
# Add the contents of "Another Directory" to the
# "/My Directory" we just created in the WIM image. Since
# the destination path already exists, this performs an
# overlay.
add "Another Directory" "/My Directory"
# Rename some file for some reason.
rename /dir_in_wim/oldfile.txt /dir_in_wim/newfile.txt
# Delete an unwanted directory.
delete --recursive /Users/Me/Documents/Junk
$ wimlib-imagex update boot.wim 2 --check < update_commands.txt
```

SEE ALSO

wimlib-imagex(1) **wimlib-imagex-capture(1)** **wimlib-imagex-info(1)** **wimlib-imagex-mountrw(1)** **wimlib-imagex-optimize(1)**