CopyFiles makes it easy to copy or move groups of files from one place to another.

#### Installation

Load COPYFILES.LCOM from the library.

### **Function**

#### (COPYFILES SOURCE DESTINATION OPTIONS)

[Function]

Copies the files designated by SOURCE to the place designated by DESTINATION.

**SOURCE** is a pattern such as given to DIRECTORY or DIR; it can also be a list of file names.

**DESTINATION** is either a directory name or a file-name pattern, with a one-to-one match of the wild card characters (\*s) in **DESTINATION** to \*s in **SOURCE**. The number of \*s in each source pattern needs to match the number of \*s in each destination pattern. (See examples below.)

*OPTIONS* is a list (if you have only one and it is a symbol, you can supply it as a symbol) that may include one or more of the options specified below.

Note: If the destination is a non-existent NS subdirectory, COPYFILES asks whether it should create it. If you answer YES, then it creates the subdirectory. If you answer NO, it aborts without processing any files.

#### **OPTION:** Conversation Mode

You can specify how verbose CopyFiles is about what it is doing:

QUIET Don't print anything while working.

(OUTPUT LISTFILE) Print the name of each file that gets copied on LISTFILE. (OUTPUT T) is the default.

TERSE Only print a period (.) for each file moved/copied.

#### **OPTION:** Query Mode

You can specify whether CopyFiles should ask for confirmation before each transfer.

ASK Ask each time before moving/copying a file (default is to not ask).

(ASK N) Ask, with default to No after DWIMWAIT seconds.

(ASK Y) Ask, with default to Yes after DWIMWAIT seconds.

#### **OPTION: Version Control**

CopyFiles normally uses the Lisp function COPYFILE to create a new file. It also usually copies only the highest version, and creates a new version at the destination. Alternatively, you can specify any of the following:

RENAME or MOVE Use RENAMEFILE instead of COPYFILE; i.e., the source is deleted afterwards.

ALLVERSIONS Copy all versions and preserve version numbers.

REPLACE

If a file by the same name exists on the destination, overwrite it (don't create a new version).

Note: When \* is used as the source version number, be sure to specify ALLVERSIONS. This is important because some devices list files by version number from highest to lowest, while by default the version numbers at the destination are assigned in ascending order. Hence, if ALLVERSIONS is not specified, the versions may be reversed, as can be verified by looking at the creation dates.

## **OPTION:** When To Copy

CopyFiles normally compares the creation dates of the file on the source and any matching file on the destination to determine whether it is necessary to copy. The following options are mutually exclusive:

ALWAYS Always copy the file.

- Copy only when a file by the same name but an earlier creation date exists on the destination.
- >A Similar to >, but also copy if the file doesn't exist on the destination; i.e., > ALWAYS.
  - Copy only when a file by the same name but a different creation date exists on the destination.
- #A Similar to #, but also copy if the file doesn't exist on the destination, i.e., # ALWAYS.
- = A Copy only if there isn't a file of the same name on the destination.

Not all combinations of options make sense; for example, ALLVERSIONS probably doesn't work right with any date comparison algorithms.

The default setting is (>A); that is, copy the highest version if it doesn't exist on the destination or if an older creation date exists, and print out messages about all files considered.

## **OPTION:** Clean-Up After Copying Files

CopyFiles can be instructed to delete some files after it has finished copying.

PURGE This involves a separate pass (afterwards): any file on the destination which doesn't have a counterpart on the source is deleted.

PURGESOURCE Converse of PURGE (and used by it): if the file is on the source and not on the destination, delete it.

# Limitations

The creation date comparison does not work when either the source or the destination does not support creation dates. For example, the TCP-IP protocol doesn't support any way to find out the creation date of a remote file. For this reason, COPYFILES can only be used in ALWAYS mode when using a TCP-IP protocol.

# **Examples**

(COPYFILES '{ERIS}<USER>\*.MAIL '{PHYLUM}<USER>OLD-\*.MAIL)

will copy any mail file on {ERIS}<USER> to {PHYLUM}<USER>, copying FOO.MAIL to OLD-FOO.MAIL.

(COPYFILES '{ERIS}<USER>\*.MAIL '{PHYLUM}<USER>OLD-\*.MAIL 'RENAME)

will use RENAMEFILE instead.

(COPYFILES '({DSK}TEST {DSK}WEST) '{PHYLUM}<MYDIR>)

will copy the files TEST and WEST from {DSK} to  $\{PHYLUM\} < MYDIR>$ .

(COPYFILES '{PHYLUM}<USER>\*.AR '{PHYLEX:}<USER> '=A)

will copy all ARs on {PHYLUM} < USER> to the PHYLEX NS file server; if any are already there, it won't bother copying them.

(COPYFILES '{PHYLUM} < USER > AR.INDEX '{DSK}AR.INDEX '(>AREPLACE))

will copy the AR index to {DSK}, replacing any older version that is already there.

COPYFILES({DSK}\*.; {FLOPPY})

will copy all files on {DSK} that have no file name extensions to {FLOPPY}.

(COPYFILES '{ERIS}<USER> '{PHYLUM}<USER> '(#A PURGE))

will make {PHYLUM}<USER> look like {ERIS}<USER>, bringing over any file that isn't already on {PHYLUM} and then deleting the ones that were on {PHYLUM} and aren't on {ERIS} any more.