NAME

openLTO - Bash scripts to manage LTO cartridges with LTFS

SYNOPSIS

```
copylto -D desk [-I identifier] [-N name] -d desk [-i identifier] [-n name] copylto [-D desk] -I identifier [-N name] [-d desk] -i identifier [-n name] copylto -h
```

Copy the content of one LTO cartridge onto another LTO cartridge.

- **-D** source LTO desk
- -I source cartridge's *identifier*
- -N source cartridge's name
- **-d** destination LTO desk
- -i destination cartridge's identifier
- **-n** destination cartridge's *name*
- **-h** display a help message

Either the LTO desk or the cartridge's identifier is necessary for both source and destination.

The **copylto** function uses the **readlto** and **writelto** functions, but does not store temporarily the files onto the computer. It copies the full content of a cartridge.

When you need to modify the content of the source LTO cartridge before copying onto the destination LTO cartridge, use the **migratelto** function instead of **copylto**.

```
formatlto -i identifier [-n name] [-c] [-f] [-d desk] | -h Format an LTO cartridge with LTFS.
```

-i The *identifier* of the cartridge is mandatory. It must be exactly 6 capital letters and/or numbers. Of course, it is good practice to use an unique identifier for each cartridge in the digital archive.

The *identifier* might possibly be followed by 'L5', 'L6', 'L7' or 'L8' specifying the drive generation or by 'M8' specifying the density code (i.e. it's a LTO-7 cartridge formatted as an LTO-8 cartridge), but all this is **not standard** and we do advise to avoid this.

- **-n** The *name* of the cartridge is optional, but if no *name* is given, then the *identifier* is used as *name* as well.
- **-c** If this optional flag is set, then lossless compression is used. It's good practice to not use compression in digital archives, especially not when the files are already lossless compressed.
- -f If this optional flag is set, then formatting is forced. This is useful only when a cartridge needs to be re-formatted. An already formatted cartridge cannot be re-formatted without this flag.

Caveat: Any data on the cartridge will be destroyed.

- -d The optional *desk* identification may be used for checking purposes.
- **-h** display a help message

indexlto [-d desk] -i identifier [-n name] | -h

Establish the full index with a manifest of checksums of an LTO cartridge.

- -d The optional LTO *desk* may be used for checking purposes.
- -i The cartridge *identifier* to index is mandatory.
- -n The optional cartridge *name* may be used for checking purposes.
- -h display a help message

We do advise to record the full index on the LTO cartridge itself as well.

listlto -l | -h

List the available LTO desks.

- -l list the available LTO desks
- -h display a help message

loadlto -d desk [-i identifier] [-n name] | -h

Load an LTO cartridge into a desk.

-d select the LTO *desk* to load the cartridge into

- -i The optional cartridge *identifier* may be used for checking purposes.
- -n The optional cartridge *name* may be used for checking purposes.
- -h display a help message

migratelto {-D desk [-I identifier] [-N name]} [-x path] -d desk [-i identifier] migratelto -h

Migrate from one LTO generation to another LTO generation.

- **-D** one or more source *desk*'s identifiers
- -I one or more source cartridge's *identifier*
- -N one or more source cartridge's *name*
- -x path to script to execute

The data are read from the source desk, piped to the script, piped to writing onto the destination desk:

read | script | write

- **-d** destination *desk*'s identifier
- -i destination cartridge's identifier
- **-n** destination cartridge's *name*
- **-h** display a help message

This function may also be used to copy files from one LTO cartridge to another, when data transformation is needed, even between the same LTO generation.

mountlto [-d desk] -i identifier | -h

Mount an LTO cartridge which is loaded in a desk.

- -d The optional *desk*'s identifier may be used for checking purposes.
- -i cartridge's identifier

-h display a help message

openlto -h | -v

About the openLTO package.

- -h display a help message
- -v display the running version

Calling openlto without parameters, doesn't gives an error message, but displays this man.

readlto [-D desk] -I identifier [-N name] -P path -p path | -h

Read data from a mounted LTO cartridge to the computer.

- **-D** The optional *desk*'s identifier may be used for checking purposes.
- -I cartridge's identifier
- -N The optional cartridge's *name* may be used for checking purposes.
- **-P** path to source
- **-p** path to destination
- **-h** display a help message

recoverlto

Recover content by using back-up from an LTO cartridge.

-h Use the -h option for the documentation.

repairlto -d desk | -h

[Try to] repair a damaged LTO cartridge.

- -d select the LTO desk to use
- -h display a help message

```
searchlto [-d desk] -i identifier (-s string|-r regex)
searchlto -d desk (-s string|-r regex)
```

searchlto -h

Search a string or a regex over the full content of an LTO.

- **-d** select the LTO *desk* to use
- -i cartridge's identifier
- -s string to search for
- **-r** regex to search for
- **-h** display a help message

It can be searched either by a string or a regular expression (regex). The syntax for regex in Bash is mandatory. Please note that searches over a full LTO cartridge take a **very long time**, especially when a regex is used.

selectlto -d desk | -h

Select an LTO desk to use.

- **-d** select the LTO *desk* to use
- -h display a help message

unmountlto -d desk [-i identifier] | -i identifier | -h

Unmount the LTO cartridge from a desk.

- **-d** select the LTO *desk* to unmount from
- -i *identifier* of the cartridge to unmount

 If also the *desk* is passed, then the optional cartridge *identifier* may be used for checking purposes.
- -h display a help message

verifylto

Verify the integrity of an LTO cartridge.

-h Use the **-h** option for the documentation.

writelto -P path [-d desk] -i identifier [-n name] | -h

Write data from the computer onto a mounted LTO cartridge.

- **-P** *path* from where to copy from
- **-d** The optional *desk*'s identifier may be used for checking purposes.
- -i cartridge's identifier
- -n The optional cartridge's *name* may be used for checking purposes.
- -h display a help message

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