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## 1 Name

*mq\_copy* - Command line interface to Linux, POSIX, message queues.

## 2 Description

Provides a command line interface, usable by scripting languages, to the Linux system of POSIX message queues.

The Linux system provides the POSIX message queues as a modified file descriptor. The default location is under the directory: */dev/mqueue* .

POSIX message queues have kernel persistence. If not removed by *unlink*, the queue will exist until the system is shut down. The action: “*unlink on close*” is a *mq\_copy* command line option.

POSIX message queues allow processes to exchange data in the form of messages.

*mq\_copy* supports line oriented, string messages. That is, lines terminated by the new-line character.

*mq\_copy* provides two basic functions: *copy\_in* and *copy\_out*.

- The *copy-in* function copies line oriented strings on *stdin* as messages to a specified queue.
- The *copy-out* function copies messages from the specified queue as line oriented strings to *stdout*.

## 3 Arguments

*mq\_copy*     [ --in | --out ]     [ options ]     /queue\_name

The minimum command arguments are the function, either *-in* (*copy\_in*) or *-out* (*copy\_out*) and the name of an existing queue. The GLIBC library requires that the queue name begin with the path separator character *'/'*.

### 3.1 Function

[ --ci | --in | -i ]     copy stdin to queue  
[ --co | --out | -o ]     copy queue to stdout

### 3.2 Options

[ --create | --cr | -c ]     Create queue if not already present on open  
[ --exclusive | --ex | -x ]     Create queue on open, queue must not exist.  
Default     Open existing queue  
[ --ro | -r ]     Open queue as read-only

[ --wo | -w ]      Open queue as write-only  
Default      Open queue as read-write

[ --mode | --md | -m ]      <perm>      Set user and group permissions. Permissions must be either three or four octal digits (not symbols).  
Default      0660

[ --attributes | --at | -a ]      <at-list>      One or more, comma separated, name=value pairs or feature.  
Example, showing default values:

-a maxmsgs=10,msgsize=256,noblock  
where:  
maxmsgs: The maximum number of messages the queue will hold.  
msgsize: The maximum byte length of any single message.  
noblock: Disable the default blocking behavior (disabled).

[ --no-block | --nb | -n ]      Open descriptor as non-blocking.  
Default      Blocking (Non-blocking operation is disabled.)

[ --time | -t ]      <tenths second>      Set maximum time to block in tenths of a second.  
Copy-in will block if no space on queue for a new message.  
Copy-out will block if no message on queue to be read.  
Default      No time limit for condition to clear.

[ --priority | --pri | -p ]      <0 .. 31>      Set the message priority during Copy-in.  
Default      15

Lower value is a higher priority. The mqueue delivers the oldest message of the highest priority first.

[ --unlink | --ul | -u ]      Unlink (delete name) queue name prior to close. Like a file descriptor, the queue remains available to any queue descriptor that has it open at the time of the unlink.