



## ***Red Hat Enterprise Linux Release 9.2 Manual Pages on 'mqueue.h.0p' command***

### ***\$ man mqueue.h.0p***

mqueue.h(0P)          POSIX Programmer's Manual          mqueue.h(0P)

#### PROLOG

This manual page is part of the POSIX Programmer's Manual. The Linux implementation of this interface may differ (consult the corresponding Linux manual page for details of Linux behavior), or the interface may not be implemented on Linux.

#### NAME

mqueue.h ? message queues (REALTIME)

#### SYNOPSIS

```
#include <mqueue.h>
```

#### DESCRIPTION

The <mqueue.h> header shall define the mqd\_t type, which is used for message queue descriptors. This is not an array type.

The <mqueue.h> header shall define the pthread\_attr\_t, size\_t, and ssize\_t types as described in <sys/types.h>.

The <mqueue.h> header shall define the struct timespec structure as described in <time.h>.

The tag sigevent shall be declared as naming an incomplete structure type, the contents of which are described in the <signal.h> header.

The <mqueue.h> header shall define the mq\_attr structure, which is used in getting and setting the attributes of a message queue. Attributes are initially set when the message queue is created. An mq\_attr structure shall have at least the following fields:

long mq\_flags Message queue flags.  
long mq\_maxmsg Maximum number of messages.  
long mq\_msgsize Maximum message size.  
long mq\_curmsgs Number of messages currently queued.

The following shall be declared as functions and may also be defined as macros. Function prototypes shall be provided.

```
int mq_close(mqd_t);  
int mq_getattr(mqd_t, struct mq_attr *);  
int mq_notify(mqd_t, const struct sigevent *);  
mqd_t mq_open(const char *, int, ...);  
ssize_t mq_receive(mqd_t, char *, size_t, unsigned *);  
int mq_send(mqd_t, const char *, size_t, unsigned);  
int mq_setattr(mqd_t, const struct mq_attr *restrict,  
               struct mq_attr *restrict);  
ssize_t mq_timedreceive(mqd_t, char *restrict, size_t,  
                        unsigned *restrict, const struct timespec *restrict);  
int mq_timedsend(mqd_t, const char *, size_t, unsigned,  
                 const struct timespec *);  
int mq_unlink(const char *);
```

Inclusion of the <mqqueue.h> header may make visible symbols defined in the headers <fcntl.h>, <signal.h>, and <time.h>.

The following sections are informative.

#### APPLICATION USAGE

None.

#### RATIONALE

None.

#### FUTURE DIRECTIONS

None.

#### SEE ALSO

<fcntl.h>, <signal.h>, <sys\_types.h>, <time.h>

The System Interfaces volume of POSIX.1?2017, mq\_close(), mq\_getattr(), mq\_notify(), mq\_open(), mq\_receive(), mq\_send(), mq\_setattr(), mq\_unlink()

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