NAME
pthread_barrierattr_destroy, **pthread_barrierattr_getpshared**, **pthread_barrierattr_init**, **pthread_barrierattr_setpshared** - manipulate a barrier attribute object

LIBRARY
POSIX Threads Library (libpthread, -lpthread)

SYNOPSIS
#include <pthread.h>

int
pthread_barrierattr_destroy(*pthread_barrierattr_t *attr*);

int
pthread_barrierattr_getpshared(*const pthread_barrierattr_t *restrict attr*, *int *restrict pshared*);

int
pthread_barrierattr_init(*pthread_barrierattr_t *attr*);

int
pthread_barrierattr_setpshared(*pthread_barrierattr_t *attr*, *int pshared*);

DESCRIPTION
The **pthread_barrierattr_init**() function will initialize *attr* with default attributes. The **pthread_barrierattr_destroy**() function will destroy *attr* and release any resources that may have been allocated on its behalf.

The **pthread_barrierattr_getpshared**() function will put the value of the process-shared attribute from *attr* into the memory area pointed to by *pshared*. The **pthread_barrierattr_setpshared**() function will set the process-shared attribute of *attr* to the value specified in *pshared*. The argument *pshared* may have one of the following values:

PTHREAD_PROCESS_PRIVATE The barrier object it is attached to may only be accessed by threads in the same process as the one that created the object.

PTHREAD_PROCESS_SHARED The barrier object it is attached to may be accessed by threads in processes other than the one that created the object.

RETURN VALUES
If successful, all these functions will return zero. Otherwise, an error number will be returned to

indicate the error.

None of these functions will return EINTR.

ERRORS

The **pthread_barrierattr_destroy**(), **pthread_barrierattr_getpshared**() and **pthread_barrierattr_setpshared**() functions may fail if:

[EINVAL]   The value specified by *attr* is invalid.

The **pthread_barrierattr_init**() function will fail if:

[ENOMEM]   Insufficient memory to initialize the barrier attribute object *attr*.

The **pthread_barrierattr_setpshared**() function will fail if:

[EINVAL]   The value specified in *pshared* is not one of the allowed values.

SEE ALSO

pthread_barrier_destroy(3), pthread_barrier_init(3), pthread_barrier_wait(3)

HISTORY

The **pthread_barrierattr_***() functions first appeared in N:M Threading Library (libkse, -lkse) in FreeBSD 5.2, and in 1:1 Threading Library (libthr, -lthr) in FreeBSD 5.3. Support for process-shared barriers appeared in FreeBSD 11.0.