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## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'pthread\_rwlockattr\_getpshared.3p' command**

**`$ man pthread_rwlockattr_getpshared.3p`**

PTHREAD\_RWLOCKATTR\_GETPSHARPOSIX)Programmer'sPTHREAD\_RWLOCKATTR\_GETPSHARED(3P)

### 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

pthread\_rwlockattr\_getpshared, pthread\_rwlockattr\_setpshared ? get and set the process-shared attribute of the read-write lock attributes object

### SYNOPSIS

```
#include <pthread.h>

int pthread_rwlockattr_getpshared(const pthread_rwlockattr_t
    *restrict attr, int *restrict pshared);

int pthread_rwlockattr_setpshared(pthread_rwlockattr_t *attr,
    int pshared);
```

### DESCRIPTION

The pthread\_rwlockattr\_getpshared() function shall obtain the value of the process-shared attribute from the initialized attributes object referenced by attr. The pthread\_rwlockattr\_setpshared() function shall set the process-shared attribute in an initialized attributes object referenced by attr.

The process-shared attribute shall be set to PTHREAD\_PROCESS\_SHARED to

permit a read-write lock to be operated upon by any thread that has access to the memory where the read-write lock is allocated, even if the read-write lock is allocated in memory that is shared by multiple processes. See Section 2.9.9, Synchronization Object Copies and Alternative Mappings for further requirements. The default value of the process-shared attribute shall be `PTHREAD_PROCESS_PRIVATE`. Additional attributes, their default values, and the names of the associated functions to get and set those attribute values are implementation-defined.

The behavior is undefined if the value specified by the `attr` argument to `pthread_rwlockattr_getpshared()` or `pthread_rwlockattr_setpshared()` does not refer to an initialized read-write lock attributes object.

## RETURN VALUE

Upon successful completion, the `pthread_rwlockattr_getpshared()` function shall return zero and store the value of the process-shared attribute of `attr` into the object referenced by the `pshared` parameter. Otherwise, an error number shall be returned to indicate the error.

If successful, the `pthread_rwlockattr_setpshared()` function shall return zero; otherwise, an error number shall be returned to indicate the error.

## ERRORS

The `pthread_rwlockattr_setpshared()` function may fail if:

**EINVAL** The `new` value specified for the attribute is outside the range of legal values for that attribute.

These functions shall not return an error code of `[EINTR]`.

The following sections are informative.

## EXAMPLES

None.

## APPLICATION USAGE

None.

## RATIONALE

None.

## FUTURE DIRECTIONS

None.

#### SEE ALSO

`pthread_rwlock_destroy()`, `pthread_rwlockattr_destroy()`

The Base Definitions volume of POSIX.1-2017, `<pthread.h>`

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