



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'posix_spawnattr_destroy.3p' command

\$ man posix_spawnattr_destroy.3p

POSIX_SPAWNATTR_DESTROY(3P)POSIX Programmer's ManuaPOSIX_SPAWNATTR_DESTROY(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

posix_spawnattr_destroy, posix_spawnattr_init ? destroy and initialize spawn attributes object (ADVANCED REALTIME)

SYNOPSIS

```
#include <spawn.h>

int posix_spawnattr_destroy(posix_spawnattr_t *attr);

int posix_spawnattr_init(posix_spawnattr_t *attr);
```

DESCRIPTION

The `posix_spawnattr_destroy()` function shall destroy a spawn attributes object. A destroyed `attr` attributes object can be reinitialized using `posix_spawnattr_init()`; the results of otherwise referencing the object after it has been destroyed are undefined. An implementation may cause `posix_spawnattr_destroy()` to set the object referenced by `attr` to an invalid value.

The `posix_spawnattr_init()` function shall initialize a spawn attributes object `attr` with the default value for all of the individual attributes used by the implementation. Results are undefined if `posix_spaw?`

`posix_spawnattr_init()` is called specifying an already initialized `posix_spawnattr_t` object.

tributes object.

A spawn attributes object is of type `posix_spawnattr_t` (defined in `<spawn.h>`) and is used to specify the inheritance of process attributes across a spawn operation. POSIX.1-2008 does not define comparison or assignment operators for the type `posix_spawnattr_t`.

Each implementation shall document the individual attributes it uses and their default values unless these values are defined by POSIX.1-2008. Attributes not defined by POSIX.1-2008, their default values, and the names of the associated functions to get and set those attribute values are implementation-defined.

The resulting spawn attributes object (possibly modified by setting individual attribute values), is used to modify the behavior of `posix_spawn()` or `posix_spawnnp()`. After a spawn attributes object has been used to spawn a process by a call to a `posix_spawn()` or `posix_spawnnp()`, any function affecting the attributes object (including destruction) shall not affect any process that has been spawned in this way.

RETURN VALUE

Upon successful completion, `posix_spawnattr_destroy()` and `posix_spawnattr_init()` shall return zero; otherwise, an error number shall be returned to indicate the error.

ERRORS

The `posix_spawnattr_init()` function shall fail if:

ENOMEM Insufficient memory exists to initialize the spawn attributes object.

The `posix_spawnattr_destroy()` function may fail if:

EINVAL The value specified by `attr` is invalid.

The following sections are informative.

EXAMPLES

None.

APPLICATION USAGE

These functions are part of the Spawn option and need not be provided

on all implementations.

RATIONALE

The original spawn interface proposed in POSIX.1-2008 defined the attributes that specify the inheritance of process attributes across a spawn operation as a structure. In order to be able to separate optional individual attributes under their appropriate options (that is, the spawn-schedparam and spawn-schedpolicy attributes depending upon the Process Scheduling option), and also for extensibility and consistency with the newer POSIX interfaces, the attributes interface has been changed to an opaque data type. This interface now consists of the type `posix_spawnattr_t`, representing a spawn attributes object, together with associated functions to initialize or destroy the attributes object, and to set or get each individual attribute. Although the new object-oriented interface is more verbose than the original structure, it is simple to use, more extensible, and easy to implement.

FUTURE DIRECTIONS

None.

SEE ALSO

`posix_spawn()`, `posix_spawnattr_getsigdefault()`, `posix_spawnattr_getflags()`, `posix_spawnattr_getpgroup()`, `posix_spawnattr_getschedparam()`, `posix_spawnattr_getschedpolicy()`, `posix_spawnattr_getsigmask()`

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

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2017

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