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## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'posix\_trace\_eventset\_add.3p' command**

**\$ man posix\_trace\_eventset\_add.3p**

POSIX\_TRACE\_EVENTSET\_ADD(3P POSIX Programmer's Manual) POSIX\_TRACE\_EVENTSET\_ADD(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\_trace\_eventset\_add, posix\_trace\_eventset\_del,  
posix\_trace\_eventset\_empty, posix\_trace\_eventset\_fill,  
posix\_trace\_eventset\_ismember ? manipulate trace event type sets (TRACING)

### SYNOPSIS

```
#include <trace.h>

int posix_trace_eventset_add(trace_event_id_t event_id,
    trace_event_set_t *set);

int posix_trace_eventset_del(trace_event_id_t event_id,
    trace_event_set_t *set);

int posix_trace_eventset_empty(trace_event_set_t *set);

int posix_trace_eventset_fill(trace_event_set_t *set, int what);

int posix_trace_eventset_ismember(trace_event_id_t event_id,
    const trace_event_set_t *restrict set, int *restrict ismember);
```

### DESCRIPTION

These primitives manipulate sets of trace event types. They operate on

data objects addressable by the application, not on the current trace event filter of any trace stream.

The `posix_trace_eventset_add()` and `posix_trace_eventset_del()` functions, respectively, shall add or delete the individual trace event type specified by the value of the argument `event_id` to or from the trace event type set pointed to by the argument `set`. Adding a trace event type already in the set or deleting a trace event type not in the set shall not be considered an error.

The `posix_trace_eventset_empty()` function shall initialize the trace event type set pointed to by the `set` argument such that all trace event types defined, both system and user, shall be excluded from the set.

The `posix_trace_eventset_fill()` function shall initialize the trace event type set pointed to by the argument `set`, such that the set of trace event types defined by the argument `what` shall be included in the set. The value of the argument `what` shall consist of one of the following values, as defined in the `<trace.h>` header:

#### POSIX\_TRACE\_WOPID\_EVENTS

All the process-independent implementation-defined system trace event types are included in the set.

#### POSIX\_TRACE\_SYSTEM\_EVENTS

All the implementation-defined system trace event types are included in the set, as are those defined in POSIX.1-2008.

#### POSIX\_TRACE\_ALL\_EVENTS

All trace event types defined, both system and user, are included in the set.

Applications shall call either `posix_trace_eventset_empty()` or `posix_trace_eventset_fill()` at least once for each object of type `trace_event_set_t` prior to any other use of that object. If such an object is not initialized in this way, but is nonetheless supplied as an argument to any of the `posix_trace_eventset_add()`, `posix_trace_eventset_del()`, or `posix_trace_eventset_ismember()` functions, the results are undefined.

The `posix_trace_eventset_ismember()` function shall test whether the

trace event type specified by the value of the argument `event_id` is a member of the set pointed to by the argument `set`. The value returned in the object pointed to by `ismember` argument is zero if the trace event type identifier is not a member of the set and a value different from zero if it is a member of the set.

## RETURN VALUE

Upon successful completion, these functions shall return a value of zero. Otherwise, they shall return the corresponding error number.

## ERRORS

These functions may fail if:

`EINVAL` The value of one of the arguments is invalid.

The following sections are informative.

## EXAMPLES

None.

## APPLICATION USAGE

None.

## RATIONALE

None.

## FUTURE DIRECTIONS

The `posix_trace_eventset_add()`, `posix_trace_eventset_del()`, `posix_trace_eventset_empty()`, `posix_trace_eventset_fill()`, and `posix_trace_eventset_ismember()` functions may be removed in a future version.

## SEE ALSO

`posix_trace_eventid_equal()`, `posix_trace_get_filter()`

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

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