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Red Hat Enterprise Linux Release 9.2 Manual Pages on 'trace.h.0p' command

\$ man trace.h.0p

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

trace.h ? tracing

SYNOPSIS

```
#include <trace.h>
```

DESCRIPTION

The <trace.h> header shall define the `posix_trace_event_info` structure, which shall include at least the following members:

```
trace_event_id_t  posix_event_id
pid_t             posix_pid
void              *posix_prog_address
pthread_t         posix_thread_id
struct timespec   posix_timestamp
int               posix_truncation_status
```

The <trace.h> header shall define the `posix_trace_status_info` structure, which shall include at least the following members:

```
int  posix_stream_full_status
int  posix_stream_overnrun_status
```

int posix_stream_status
int posix_log_full_status
int posix_log_overrun_status
int posix_stream_flush_error
int posix_stream_flush_status

The <trace.h> header shall define the following symbolic constants:

POSIX_TRACE_ALL_EVENTS
POSIX_TRACE_APPEND
POSIX_TRACE_CLOSE_FOR_CHILD
POSIX_TRACE_FILTER
POSIX_TRACE_FLUSH
POSIX_TRACE_FLUSH_START
POSIX_TRACE_FLUSH_STOP
POSIX_TRACE_FLUSHING
POSIX_TRACE_FULL
POSIX_TRACE_LOOP
POSIX_TRACE_NO_OVERRUN
POSIX_TRACE_NOT_FLUSHING
POSIX_TRACE_NOT_FULL
POSIX_TRACE_INHERITED
POSIX_TRACE_NOT_TRUNCATED
POSIX_TRACE_OVERFLOW
POSIX_TRACE_OVERRUN
POSIX_TRACE_RESUME
POSIX_TRACE_RUNNING
POSIX_TRACE_START
POSIX_TRACE_STOP
POSIX_TRACE_SUSPENDED
POSIX_TRACE_SYSTEM_EVENTS
POSIX_TRACE_TRUNCATED_READ
POSIX_TRACE_TRUNCATED_RECORD
POSIX_TRACE_UNNAMED_USER_EVENT
POSIX_TRACE_UNTIL_FULL

POSIX_TRACE_WOPID_EVENTS

The <trace.h> header shall define the `size_t`, `trace_attr_t`, `trace_event_id_t`, `trace_event_set_t`, and `trace_id_t` types as described in <sys/types.h>.

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

```
int posix_trace_attr_destroy(trace_attr_t *);
int posix_trace_attr_getclockres(const trace_attr_t *,
    struct timespec *);
int posix_trace_attr_getcreatetime(const trace_attr_t *,
    struct timespec *);
int posix_trace_attr_getgenversion(const trace_attr_t *, char *);
int posix_trace_attr_getinherited(const trace_attr_t *restrict,
    int *restrict);
int posix_trace_attr_getlogfullpolicy(const trace_attr_t *restrict,
    int *restrict);
int posix_trace_attr_getlogsize(const trace_attr_t *restrict,
    size_t *restrict);
int posix_trace_attr_getmaxdatasize(const trace_attr_t *restrict,
    size_t *restrict);
int posix_trace_attr_getmaxsystemeventsize(const trace_attr_t *restrict,
    size_t *restrict);
int posix_trace_attr_getmaxusereventsize(const trace_attr_t *restrict,
    size_t, size_t *restrict);
int posix_trace_attr_getname(const trace_attr_t *, char *);
int posix_trace_attr_getstreamfullpolicy(const trace_attr_t *restrict,
    int *restrict);
int posix_trace_attr_getstreamsize(const trace_attr_t *restrict,
    size_t *restrict);
int posix_trace_attr_init(trace_attr_t *);
int posix_trace_attr_setinherited(trace_attr_t *, int);
int posix_trace_attr_setlogfullpolicy(trace_attr_t *, int);
int posix_trace_attr_setlogsize(trace_attr_t *, size_t);
```

```

int posix_trace_attr_setmaxdatasize(trace_attr_t *, size_t);
int posix_trace_attr_setname(trace_attr_t *, const char *);
int posix_trace_attr_setstreamfullpolicy(trace_attr_t *, int);
int posix_trace_attr_setstreamsize(trace_attr_t *, size_t);
int posix_trace_clear(trace_id_t);
int posix_trace_close(trace_id_t);
int posix_trace_create(pid_t, const trace_attr_t *restrict,
    trace_id_t *restrict);
int posix_trace_create_withlog(pid_t, const trace_attr_t *restrict,
    int, trace_id_t *restrict);
void posix_trace_event(trace_event_id_t, const void *restrict, size_t);
int posix_trace_eventid_equal(trace_id_t, trace_event_id_t,
    trace_event_id_t);
int posix_trace_eventid_get_name(trace_id_t, trace_event_id_t, char *);
int posix_trace_eventid_open(const char *restrict,
    trace_event_id_t *restrict);
int posix_trace_eventset_add(trace_event_id_t, trace_event_set_t *);
int posix_trace_eventset_del(trace_event_id_t, trace_event_set_t *);
int posix_trace_eventset_empty(trace_event_set_t *);
int posix_trace_eventset_fill(trace_event_set_t *, int);
int posix_trace_eventset_ismember(trace_event_id_t,
    const trace_event_set_t *restrict, int *restrict);
int posix_trace_eventtypelist_getnext_id(trace_id_t,
    trace_event_id_t *restrict, int *restrict);
int posix_trace_eventtypelist_rewind(trace_id_t);
int posix_trace_flush(trace_id_t);
int posix_trace_get_attr(trace_id_t, trace_attr_t *);
int posix_trace_get_filter(trace_id_t, trace_event_set_t *);
int posix_trace_get_status(trace_id_t,
    struct posix_trace_status_info *);
int posix_trace_getnext_event(trace_id_t,
    struct posix_trace_event_info *restrict, void *restrict,
    size_t, size_t *restrict, int *restrict);

```

```

int posix_trace_open(int, trace_id_t *);
int posix_trace_rewind(trace_id_t);
int posix_trace_set_filter(trace_id_t, const trace_event_set_t *, int);
int posix_trace_shutdown(trace_id_t);
int posix_trace_start(trace_id_t);
int posix_trace_stop(trace_id_t);
int posix_trace_timedgetnext_event(trace_id_t,
    struct posix_trace_event_info *restrict, void *restrict,
    size_t, size_t *restrict, int *restrict,
    const struct timespec *restrict);
int posix_trace_trid_eventid_open(trace_id_t, const char *restrict,
    trace_event_id_t *restrict);
int posix_trace_trygetnext_event(trace_id_t,
    struct posix_trace_event_info *restrict, void *restrict, size_t,
    size_t *restrict, int *restrict);

```

The following sections are informative.

APPLICATION USAGE

None.

RATIONALE

None.

FUTURE DIRECTIONS

The <trace.h> header may be removed in a future version.

SEE ALSO

<sys_types.h>

The System Interfaces volume of POSIX.1?2017, Section 2.11, Tracing,

posix_trace_attr_destroy(), posix_trace_attr_getclockres(),

posix_trace_attr_getinherited(), posix_trace_attr_getlogsize(),

posix_trace_clear(), posix_trace_close(), posix_trace_create(),

posix_trace_event(), posix_trace_eventid_equal(),

posix_trace_eventset_add(), posix_trace_eventtypelist_getnext_id(),

posix_trace_get_attr(), posix_trace_get_filter(), posix_trace_get?

next_event(), posix_trace_start()

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