



Linux Ubuntu 26.04 Manual Pages on command 'tracecmd_read_at.3'

\$ man tracecmd_read_at.3

LIBTRACECMD(3)

libtracefs Manual

LIBTRACECMD(3)

NAME

tracecmd_read_cpu_first, tracecmd_read_data, tracecmd_read_at, tracecmd_free_record,
tracecmd_get_tep - Read recorded events from a trace file.

SYNOPSIS

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

```
struct tep_record *tracecmd_read_cpu_first(struct tracecmd_input *handle, int cpu);  
struct tep_record *tracecmd_read_data(struct tracecmd_input *handle, int cpu);  
struct tep_record *tracecmd_read_at(struct tracecmd_input *handle, unsigned long long offset, int *cpu);  
void tracecmd_free_record(struct tep_record *record);  
struct tep_handle *tracecmd_get_tep(struct tracecmd_input *handle);
```

DESCRIPTION

This set of APIs can be used to read tracing data from a trace file opened with
tracecmd_open()(3), tracecmd_open_fd()(3) or tracecmd_open_head()(3).

The tracecmd_read_cpu_first() function reads the first trace record for a given cpu from a
trace file associated with handle. The returned record must be freed with
tracecmd_free_record().

The `tracecmd_read_data()` function reads the next trace record for a given `cpu` from a trace file associated with `handle` and increments the read location pointer, so that the next call to `tracecmd_read_data()` will not read the same record again. The returned record must be freed with `tracecmd_free_record()`.

The `tracecmd_read_at()` function reads a trace record from a specific offset within the file associated with `handle`. The CPU on which the recorded event occurred is stored in the `cpu`. The function does not change the current read location pointer. The returned record must be freed with `tracecmd_free_record()`.

The `tracecmd_free_record()` function frees a record returned by any of the `tracecmd_read_*` APIs.

The `tracecmd_get_tep()` function returns a `tep` context for a given `handle`.

RETURN VALUE

The `tracecmd_read_cpu_first()`, `tracecmd_read_data()` and `tracecmd_read_at()` functions return a pointer to `struct tep_record` or `NULL` in case of an error. The returned record must be freed with `tracecmd_free_record()`.

The `tracecmd_get_tep()` function returns a pointer to `tep` context or `NULL` if there is no `tep` context for the given `handle`. The returned `tep` pointer must not be freed.

EXAMPLE

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

...

struct tracecmd_input *handle = tracecmd_open("trace.dat");

if (!handle) {
    /* Failed to open trace.dat file */
}

...

unsigned long long offset = 0;

struct tep_record *rec;
```

```

int cpu = 0;

rec = tracecmd_read_cpu_first(handle, cpu);

while (rec) {

    ...

    if ( /* some interesting record noticed */ ) {

        /* store the offset of the interesting record */

        offset = rec->offset;

    }

    ...

    tracecmd_free_record(rec);

    rec = tracecmd_read_data(handle, cpu);

}

...

if (offset) {

    rec = tracecmd_read_at(handle, offset, &cpu);

    if (rec) {

        /* Got record at offset on cpu */

        ...

        tracecmd_free_record(rec);

    }

}

...

tracecmd_close(hadle);

```

FILES

trace-cmd.h

Header file to include in order to have access to the library APIs.

-ltracecmd

Linker switch to add when building a program that uses the library.

SEE ALSO

libtracefs(3), libtraceevent(3), trace-cmd(1) trace-cmd.dat(5)

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REPORTING BUGS

Report bugs to <linux-trace-devel@vger.kernel.org[3]>

LICENSE

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RESOURCES

<https://git.kernel.org/pub/scm/utils/trace-cmd/trace-cmd.git/>

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