

NAME

`unw_get_proc_name` -- get name of current procedure

SYNOPSIS

```
#include <libunwind.h>
```

```
int unw_get_proc_name(unw_cursor_t *cp, char *bufp, size_t len, unw_word_t *offp);
```

DESCRIPTION

The `unw_get_proc_name()` routine returns the name of the procedure that created the stack frame identified by argument `cp`. The `bufp` argument is a pointer to a character buffer that is at least `len` bytes long. This buffer is used to return the name of the procedure. The `offp` argument is a pointer to a word that is used to return the byte offset of the instruction-pointer saved in the stack frame identified by `cp`, relative to the start of the procedure. For example, if procedure `foo()` starts at address `0x40003000`, then invoking `unw_get_proc_name()` on a stack frame with an instruction pointer value of `0x40003080` would return a value of `0x80` in the word pointed to by `offp` (assuming the procedure is at least `0x80` bytes long).

Note that on some platforms there is no reliable way to distinguish between procedure names and ordinary labels. Furthermore, if symbol information has been stripped from a program, procedure names may be completely unavailable or may be limited to those exported via a dynamic symbol table. In such cases, `unw_get_proc_name()` may return the name of a label or a preceding (nearby) procedure. However, the offset returned through `offp` is always relative to the returned name, which ensures that the value (address) of the returned name plus the returned offset will always be equal to the instruction pointer of the stack frame identified by `cp`.

RETURN VALUE

On successful completion, `unw_get_proc_name()` returns 0. Otherwise the negative value of one of the error codes below is returned.

THREAD AND SIGNAL SAFETY

`unw_get_proc_name()` is thread safe. If cursor `cp` is in the local address space, this routine is also safe to use from a signal handler.

ERRORS

`UNW_EUNSPEC`

An unspecified error occurred.

`UNW_ENOINFO`

Libunwind was unable to determine the name of the procedure.

UNW_ENOMEM

The procedure name is too long to fit in the buffer provided. A truncated version of the name has been returned.

In addition, `unw_get_proc_name()` may return any error returned by the `access_mem()` callback (see `unw_create_addr_space(3libunwind)`).

SEE ALSO

`libunwind(3libunwind)`, `unw_get_proc_info(3libunwind)`

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