

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()` call-back (see `unw_create_addr_space(3)`).

SEE ALSO

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

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