### **NAME**

unw\_get\_fpreg -- get contents of floating-point register

## **SYNOPSIS**

#include libunwind.h>

int unw\_get\_fpreg(unw\_cursor\_t \*cp, unw\_regnum\_t reg, unw\_fpreg\_t \*valp);

## **DESCRIPTION**

The unw\_get\_fpreg() routine reads the value of floating-point register reg in the stack frame identified by cursor cp and stores the value in the variable pointed to by valp.

The register numbering is target-dependent and described in separate manual pages (e.g., libunwind-ia64(3) for the IA-64 target). Furthermore, the exact set of accessible registers may depend on the type of frame that cp is referring to. For ordinary stack frames, it is normally possible to access only the preserved ("callee-saved") registers and frame-related registers (such as the stack-pointer). However, for signal frames (see unw\_is\_signal\_frame(3)), it is usually possible to access all registers.

Note that unw\_get\_fpreg() can only read the contents of floating-point registers. See unw\_get\_fpreg(3) for a way to read registers which fit in a single word.

# **RETURN VALUE**

On successful completion, unw\_get\_fpreg() returns 0. Otherwise the negative value of one of the error-codes below is returned.

## THREAD AND SIGNAL SAFETY

unw\_get\_fpreg() is thread-safe as well as safe to use from a signal handler.

#### **ERRORS**

UNW\_EUNSPEC

An unspecified error occurred.

## UNW\_EBADREG

An attempt was made to read a register that is either invalid or not accessible in the current frame.

In addition, unw\_get\_fpreg() may return any error returned by the access\_mem(), access\_reg(), and access\_fpreg() call-backs (see unw\_create\_addr\_space(3)).

#### SEE ALSO

libunwind(3), libunwind-ia64(3), unw get reg(3), unw is fpreg(3), unw is signal frame(3),

unw\_set\_fpreg(3)

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