NAME

unw_set_reg -- set register contents

SYNOPSIS

#include libunwind.h>

int unw_set_reg(unw_cursor_t *cp, unw_regnum_t reg, unw_word_t val);

DESCRIPTION

The unw_set_reg() routine sets the value of register reg in the stack frame identified by cursor cp to the value passed in val.

The register numbering is target dependent and described in separate manual pages (e.g., libunwind-ia64(3libunwind) 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(3libunwind)), it is usually possible to access all registers.

Note that unw_set_reg() can only write the contents of registers whose values fit in a single word. See unw_set_fpreg(3libunwind) for a way to write registers which do not fit this constraint.

RETURN VALUE

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

THREAD AND SIGNAL SAFETY

unw_set_reg() 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 write a register that is either invalid or not accessible in the current frame.

UNW_EREADONLY

An attempt was made to write to a read-only register.

In addition, unw_set_reg() may return any error returned by the access_mem(), access_reg(), and

access_fpreg() callbacks (see unw_create_addr_space(3libunwind)).

SEE ALSO

libunwind(3libunwind), libunwind-ia64(3libunwind), unw_get_reg(3libunwind), unw_is_signal_frame(3libunwind), unw_set_fpreg(3libunwind)

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