NAME

dwarf_get_fde_info_for_reg - retrieve register rule

LIBRARY

DWARF Access Library (libdwarf, -ldwarf)

SYNOPSIS

#include <libdwarf.h>

int
dwarf_get_fde_info_for_reg(*Dwarf_Fde fde*, *Dwarf_Half table_column*, *Dwarf_Addr pc*,
    *Dwarf_Signed *offset_relevant*, *Dwarf_Signed *register_num*, *Dwarf_Signed *offset*,
    *Dwarf_Addr *row_pc*, *Dwarf_Error *error*);

DESCRIPTION

Function **dwarf_get_fde_info_for_reg**() retrieves a register rule from the register rule table associated with a given FDE descriptor, given a program counter address and rule column number.

Argument *fde* should reference a valid DWARF FDE descriptor.

Arugment *table_column* should hold the column number of the register rule desired.

Argument *pc* should hold the program counter address to be used to locate the desired register rule row.

On successful execution, **dwarf_get_fde_info_for_reg**() stores information about the register rule found into the locations pointed to by the arguments *offset_relevant*, *register_num*, *offset* and *row_pc*.

If there is an offset value associated with the register rule, the location pointed to by argument *offset_relevant* will be set to 1.

Argument *register_num* should point to a location which will hold the register number associated with the register rule.

Argument *offset* should point to a location which will be set to the offset value associated with the register rule, or to 0 if the register rule does not have an offset value.

Argument *row_pc* should point to a location which will be set to the lowest program counter address associated with the register rule found.

If argument *err* is not NULL, it will be used to return an error descriptor in case of an error.

COMPATIBILITY

Function **dwarf_get_fde_info_for_reg**() is deprecated since it only supports DWARF2 frame sections. Applications should instead use function dwarf_get_fde_info_for_reg3(3) which supports both DWARF2 and DWARF3 frame sections.

RETURN VALUES

Function **dwarf_get_fde_info_for_reg**() returns DW_DLV_OK when it succeeds. In case of an error, it returns DW_DLV_ERROR and sets the argument *err*.

ERRORS

Function **dwarf_get_fde_info_for_reg**() can fail with:

[DW_DLE_ARGUMENT]   One of the arguments *fde*, *offset_relevant*, *register_num*, *offset* or *row_pc* was NULL.

[DW_DLE_FRAME_TABLE_COL_BAD]   The column number provided in argument *table_column* was too large.

[DW_DLE_PC_NOT_IN_FDE_RANGE]   The program counter value provided in argument *pc* did not fall in the range covered by argument *fde*.

SEE ALSO

dwarf(3), dwarf_get_fde_at_pc(3), dwarf_get_fde_info_for_all_regs(3), dwarf_get_fde_info_for_all_regs3(3), dwarf_get_fde_info_for_cfa_reg3(3), dwarf_get_fde_info_for_reg3(3), dwarf_get_fde_n(3), dwarf_set_frame_cfa_value(3), dwarf_set_frame_rule_initial_value(3), dwarf_set_frame_rule_table_size(3), dwarf_set_frame_same_value(3), dwarf_set_frame_undefined_value(3)