NAME

dwarf_add_AT_location_expr - create an attribute descriptor for a location expression

LIBRARY

DWARF Access Library (libdwarf, -ldwarf)

SYNOPSIS

#include <libdwarf.h>

Dwarf_P_Attribute
dwarf_add_AT_location_expr(*Dwarf_P_Debug dbg*, *Dwarf_P_Die die*, *Dwarf_Half attr*,
  Dwarf_P_Expr loc_expr, *Dwarf_Error *err*);

DESCRIPTION

Function **dwarf_add_AT_location_expr**() creates an attribute descriptor for a location expression and attaches it to the debugging information entry referenced by argument *die*.

Argument *dbg* should reference a DWARF producer instance allocated using dwarf_producer_init(3) or dwarf_producer_init_b(3).

Argument *die* should reference a debugging information entry allocated using dwarf_new_die(3).

Argument *attr* specifies the attribute code of the created attribute descriptor.

Argument *loc_expr* should reference a location expression descriptor allocated using dwarf_new_expr(3).

The attribute created by function **dwarf_add_AT_location_expr**() will have one of the DWARF forms DW_FORM_block, DW_FORM_block1, DW_FORM_block2 or DW_FORM_block4, depending on the size of the byte stream generated by the location expression descriptor referenced by argument *loc_expr*.

If argument *err* is not NULL, it will be used by to store error information in case of an error.

RETURN VALUES

On success, function **dwarf_add_AT_location_expr**() returns the created attribute descriptor. In case of an error, function **dwarf_add_AT_location_expr**() returns DW_DLV_BADADDR and sets the argument *err*.

ERRORS

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

[DW_DLE_ARGUMENT]   One of the arguments *dbg*, *die* or *loc_expr* was NULL.

[DW_DLE_MEMORY]   An out of memory condition was encountered during the execution of the
                     function.

SEE ALSO

dwarf(3), dwarf_new_die(3), dwarf_new_expr(3), dwarf_producer_init(3), dwarf_producer_init_b(3)