NAME

dwarf_get_loclist_entry - retrieve DWARF location list entry

LIBRARY

DWARF Access Library (libdwarf, -ldwarf)

SYNOPSIS

#include <libdwarf.h>

int

dwarf_get_loclist_entry(*Dwarf_Debug dbg*, *Dwarf_Unsigned offset*, *Dwarf_Addr *hipc*,
   *Dwarf_Addr *lopc*, *Dwarf_Ptr *data*, *Dwarf_Unsigned *entry_len*, *Dwarf_Unsigned *next_entry*,
   *Dwarf_Error *err*);

DESCRIPTION

Function **dwarf_get_loclist_entry**() retrieves a location list entry from the DWARF section ".debug_loc".

Argument *dbg* should reference a DWARF debug context allocated using dwarf_init(3).

Argument *offset* is an offset, relative to the ".debug_loc" section, to the start of the desired location list
entry.

Argument *hipc* should point to a location which will hold the offset, relative to the base address of the
location list entry, of the highest program counter value for the entry.

Argument *lowpc* should point to a location which will hold the offset, relative to the base address of the
location list entry, of the lowest program counter value for the entry.

Argument *data* should point to a location which will be set to a pointer to the location list data.

Argument *entry_len* should point to a location which will hold the length in bytes of the location list
data returned in argument *data*.

Argument *next_entry* should point to a location which will hold the offset of the next location list entry.

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

RETURN VALUES

Function **dwarf_get_loclist_entry**() returns DW_DLV_OK when it succeeds. It returns
DW_DLV_NO_ENTRY if there is no location list at the specified offset *offset*. In case of an error, it

returns DW_DLV_ERROR and sets the argument *err*.

EXAMPLES

To iterate through all the location list entries in the ".debug_loc" section, use:

```
Dwarf_Debug dbg;
Dwarf_Unsigned off, len, next;
Dwarf_Addr hipc, lopc;
Dwarf_Ptr data;
Dwarf_Error de;
int ret;

off = 0;
while ((ret = dwarf_get_loclist_entry(dbg, off, &hipc, &lopc, &data,
    &len, &next, &de)) == DW_DLV_OK) {
            /* ... use loclist entry ... */
            off = next;
}
if (ret == DW_DLV_ERROR)
            warnx("dwarf_get_loclist_entry failed: %s", dwarf_errmsg(de));
```

ERRORS

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

[DW_DLE_ARGUMENT]   One of the arguments *dbg*, *hipc*, *lopc*, *data*, *entry_len* or *next_entry* was
                    NULL.

[DW_DLE_NO_ENTRY]   There is no location list at the specified offset *offset*.

SEE ALSO

dwarf(3), dwarf_loclist(3), dwarf_loclist_from_expr(3), dwarf_loclist_from_expr_a(3),
dwarf_loclist_n(3)