

NAME

dwarf_die_CU_offset, **dwarf_die_CU_offset_range**, **dwarf_dieoffset**,
dwarf_get_cu_die_offset_given_cu_header_offset, **dwarf_get_cu_die_offset_given_cu_header_offset_b**
- return offsets of DWARF debugging information entries

LIBRARY

DWARF Access Library (libdwarf, -ldwarf)

SYNOPSIS

#include <libdwarf.h>

int

dwarf_die_CU_offset(*Dwarf_Die die*, *Dwarf_Off *ret_offset*, *Dwarf_Error *err*);

int

dwarf_die_CU_offset_range(*Dwarf_Die die*, *Dwarf_Off *cu_offset*, *Dwarf_Off *cu_length*,
*Dwarf_Error *err*);

int

dwarf_dieoffset(*Dwarf_Die die*, *Dwarf_Off *ret_offset*, *Dwarf_Error *err*);

int

dwarf_get_cu_die_offset_given_cu_header_offset(*Dwarf_Debug dbg*, *Dwarf_Off in_cu_header_offset*,
*Dwarf_Off *out_cu_die_offset*, *Dwarf_Error *err*);

int

dwarf_get_cu_die_offset_given_cu_header_offset_b(*Dwarf_Debug dbg*,
Dwarf_Off in_cu_header_offset, *Dwarf_Bool is_info*, *Dwarf_Off *out_cu_die_offset*,
*Dwarf_Error *err*);

DESCRIPTION

These functions are used to retrieve offsets for DWARF debugging information entries.

Function **dwarf_die_CU_offset**() returns the offset of the debugging information entry referenced by argument *die* relative to the start of its containing compilation unit. Argument *ret_offset* should point to the location that is to hold the returned offset. If argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

Function **dwarf_die_CU_offset_range**() returns the section-relative offset and length of the compilation unit containing the debugging information entry referenced by argument *die*. Argument *cu_offset*

should point to a location that will hold the returned offset. Argument *cu_length* should point to a location that will hold the returned length of the compilation unit. If argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

Function **dwarf_dieoffset()** retrieves the section-relative offset of the debugging information entry referenced by argument *die*. Argument *ret_offset* should point to a location that is to hold the returned section-relative offset. If argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

Function **dwarf_get_cu_die_offset_given_cu_header_offset()** returns the offset for the first debugging information entry for a compilation unit, given an offset to the header of the compilation unit. Argument *dbg* should reference a valid debugging context allocated using **dwarf_init(3)**. Argument *in_cu_header_offset* contains the offset to the start of a compilation unit. Argument *out_cu_die_offset* points to a location that will hold the returned offset. If argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

Function **dwarf_get_cu_die_offset_given_cu_header_offset_b()** behaves identically to the function **dwarf_get_cu_die_offset_given_cu_header_offset()** when the argument *is_info* is non-zero. When the argument *is_info* is zero, function **dwarf_get_cu_die_offset_given_cu_header_offset_b()** returns the offset for the first debugging information entry for a type unit, given an offset to the header of the type unit in argument *in_cu_header_offset*. Argument *out_cu_die_offset* points to a location that will hold the returned offset. If the argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

RETURN VALUES

On success, these functions return DW_DLV_OK. In case of an error, these functions return DW_DLV_ERROR and set argument *err*.

Function **dwarf_get_cu_die_offset_given_cu_header_offset()** and **dwarf_get_cu_die_offset_given_cu_header_offset_b()** returns DW_DLV_NO_ENTRY and sets argument *err* if there is no compilation or type unit located at the offset specified in argument *in_cu_header_offset*.

ERRORS

These functions may fail with the following errors:

[DW_DLE_ARGUMENT] One of the arguments *cu_length*, *cu_offset*, *dbg*, *die*, *out_cu_die_offset* or *ret_offset* was NULL.

[DW_DLE_NO_ENTRY] Argument *in_cu_header_offset* specified an unknown offset.

SEE ALSO

dwarf(3), dwarf_next_cu_header(3), dwarf_offdie(3), dwarf_offdie_b(3)