

NAME

dwarf_get_str - retrieve a string from the DWARF string section

LIBRARY

DWARF Access Library (libdwarf, -ldwarf)

SYNOPSIS

```
#include <libdwarf.h>
```

int

```
dwarf_get_str(Dwarf_Debug dbg, Dwarf_Off offset, char **string, Dwarf_Signed *len,  
              Dwarf_Error *err);
```

DESCRIPTION

Function **dwarf_get_str()** retrieves a NUL-terminated string from the DWARF string section ".debug_str".

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

Argument *offset* should be an offset, relative to the ".debug_str" section, specifying the start of the desired string.

Argument *string* should point to a location which will hold a returned pointer to a NUL-terminated string.

Argument *len* should point to a location which will hold the length of the returned string. The returned length does not include the space needed for the NUL-terminator.

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

RETURN VALUES

Function **dwarf_get_str()** returns DW_DLV_OK when it succeeds. It returns DW_DLV_NO_ENTRY if there is no ".debug_str" section associated with the specified debugging context, or if the provided offset *offset* is at the very end of ".debug_str" section. In case of an error, it returns DW_DLV_ERROR and sets the argument *err*.

EXAMPLES

To retrieve all the strings in the DWARF string section, use:

```
Dwarf_Debug dbg;
```

```
Dwarf_Off offset;
Dwarf_Signed len;
Dwarf_Error de;
char *str;
int ret

offset = 0;
while ((ret = dwarf_get_str(dbg, offset, &str, &len, &de)) ==
        DW_DLV_OK) {
    /* .. Use the retrieved string. .. */
    offset += len + 1; /* Account for the terminating NUL. */
}

if (ret == DW_DLV_ERROR)
    warnx("dwarf_get_str: %s", dwarf_errmsg(de));
```

ERRORS

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

[DW_DLE_ARGUMENT] One of the arguments *dbg*, *string* or *len* was NULL.

[DW_DLE_ARGUMENT] Argument *offset* was out of range.

[DW_DLE_NO_ENTRY] The debugging context *dbg* did not contain a ".debug_str" string section.

[DW_DLE_NO_ENTRY] Argument *offset* was at the very end of the ".debug_str" section.

SEE ALSO

dwarf(3), dwarf_init(3)