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)