

**NAME**

**dwarf\_add\_arange**, **dwarf\_add\_arange\_b** - add address range information to a DWARF producer instance

**LIBRARY**

DWARF Access Library (libdwarf, -ldwarf)

**SYNOPSIS**

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

*Dwarf\_Unsigned*

```
dwarf_add_arange(Dwarf_P_Debug dbg, Dwarf_Addr start, Dwarf_Unsigned length,  
                 Dwarf_Signed symbol_index, Dwarf_Error *err);
```

*Dwarf\_Unsigned*

```
dwarf_add_arange_b(Dwarf_P_Debug dbg, Dwarf_Addr start, Dwarf_Unsigned length,  
                  Dwarf_Unsigned symbol_index, Dwarf_Unsigned end_symbol_index,  
                  Dwarf_Addr offset_from_end_symbol, Dwarf_Error *err);
```

**DESCRIPTION**

Function **dwarf\_add\_arange\_b()** adds an address range entry to a producer instance.

Argument *dbg* should reference a DWARF producer instance allocated using **dwarf\_producer\_init(3)** or **dwarf\_producer\_init\_b(3)**.

Argument *start* specifies the relocatable start address of the address range.

Argument *length* specifies the length of the address range.

Argument *symbol\_index* specifies the ELF symbol index of the first symbol to be used for relocation.

Argument *end\_symbol\_index* specifies the ELF symbol index of the second symbol to be used for relocation.

- If argument *end\_symbol\_index* is not 0, the DW\_DLC\_SYMBOLIC\_RELOCATIONS flag should have been set on the DWARF producer instance. The address value specified by argument *start* will be treated as an offset value from the first symbol, and the argument *offset\_from\_end\_symbol* should hold an offset value from the second symbol. Application code can retrieve the relocation entries for the symbol pair by calling function **dwarf\_get\_relocation\_info(3)**. The relocation entry for the first symbol will have type **dwarf\_drt\_first\_of\_length\_pair** and the relocation entry for the

second symbol will have type `dwarf_drt_second_of_length_pair`.

- If argument *end\_symbol\_index* is 0, argument *offset\_from\_end\_symbol* will be ignored and only one symbol is used for relocation.

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

Function **dwarf\_add\_arange()** is deprecated. It is similar to function **dwarf\_add\_arange\_b()** except that it cannot handle all possible symbol index values and supports only one relocation symbol.

## RETURN VALUES

On success, these functions return a non-zero value. In case of an error, these functions return 0 and set the argument *err*.

## ERRORS

These functions can fail with:

[DW\_DLE\_ARGUMENT] Argument *dbg* was NULL.

[DW\_DLE\_ARGUMENT] Argument *end\_symbol\_index* was non-zero, but the flag `DW_DLC_SYMBOLIC_RELOCATIONS` was not set on the producer instance.

[DW\_DLE\_MEMORY] An out of memory condition was encountered during the execution of the function.

## SEE ALSO

`dwarf(3)`, `dwarf_get_relocation_info(3)`, `dwarf_producer_init(3)`, `dwarf_producer_init_b(3)`