#### **NAME**

dwarf\_hasform, dwarf\_whatform, dwarf\_whatform\_direct - query attribute forms

### **LIBRARY**

DWARF Access Library (libdwarf, -ldwarf)

#### **SYNOPSIS**

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

int

 $\mathbf{dwarf\_hasform}(Dwarf\_Attribute\ attr,\ Dwarf\_Half\ form,\ Dwarf\_Bool\ *ret,\ Dwarf\_Error\ *err);$ 

int

**dwarf\_whatform**(Dwarf\_Attribute attr, Dwarf\_Half \*retform, Dwarf\_Error \*err);

int

dwarf\_whatform\_direct(Dwarf\_Attribute attr, Dwarf\_Half \*retform, Dwarf\_Error \*err);

### DESCRIPTION

Function **dwarf\_hasform**() indicates whether the DWARF attribute denoted by argument *attr* has the attribute form specified by argument *form*. If the attribute has the specified form, then argument *ret* is set to a non-zero value, otherwise it is set to zero. If argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

Function **dwarf\_whatform**() sets the location specified by argument *retform* to the attribute form code for the DWARF attribute referenced by argument *attr*. If the attribute referenced by argument *attr* has an indirect form attribute, this function will return the final form for the attribute. If argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

Function **dwarf\_whatform\_direct**() sets the location specified by argument *retform* to the attribute form code for the DWARF attribute referenced by argument *attr*. If the form is an indirect form, the function sets the location specified by argument *retform* to DW\_FORM\_indirect. If argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

# **RETURN VALUES**

These functions return DW\_DLV\_OK on success. In case of an error, these functions return DW\_DLV\_ERR and set argument *err*.

# **ERRORS**

These functions may fail with the following errors:

[DW\_DLE\_ARGUMENT] Any of the arguments attr, ret, or retform was NULL.

## **SEE ALSO**

dwarf(3), dwarf\_attr(3), dwarf\_hasattr(3)