

defined

See Also

The Default Text Encoding on page III-465, Text Encoding Names and Codes on page III-490

defined

defined(*symbol*)

The defined function returns 1 if the symbol is defined 0 if the symbol is not defined.

symbol is a symbol possibly created by a #define statement or by SetIgorOption poundDefine=*symbol*.

symbol is a name, not a string. However you can use \$ to convert a string expression to a name.

Details

The defined function can be used in three ways:

Outside of a procedure using a #if statement

Inside a procedure using a #if statement

Inside a procedure using an if statement

For example:

```
#define DEBUG

#if defined(DEBUG)          // Outside of a function with #if
    Constant kSomeConstant = 100
#else
    Constant kSomeConstant = 50
#endif

Function Test1()           // Inside a function with #if
    #if defined(DEBUG)
        Print "Debugging"
    else
        Print "Not debugging"
    endif
End

Function Test1()           // Inside a function with if
    if (defined(DEBUG))
        Print "Debugging"
    else
        Print "Not debugging"
    endif
End
```

In these examples, we could have just as well used #ifdef instead of the defined function. For logical combinations of conditions however, only defined will do:

```
#if (defined(SYMBOL1) && defined(SYMBOL2))
    .
.
#endif
```

When used in a procedure window, defined(*symbol*) returns 1 if *symbol* is defined at the time the line is compiled. In a given procedure file, only the following symbols are visible:

Symbols defined earlier in that procedure file *

Symbols defined in the built-in procedure window †

Predefined symbols (see **Predefined Global Symbols** on page IV-110)

Symbols defined by **SetIgorOption** poundDefine=*symbol*

* When used in the body of a procedure, as opposed to outside of a procedure, a symbol defined anywhere in a given procedure window is visible. However, to avoid depending on this confusing exception, you should define all symbols before they are referenced in a procedure file.

† Symbols defined in the built-in procedure window are not available to independent modules.

When the defined function is used from the command line, only symbols defined in the built-in procedure window, predefined symbols, and symbols defined using SetIgorOption are visible.