NAME

handlecond() - sets a function to handle a condition

SYNOPSIS

#include <schily/sigblk.h>

void

handlecond(signame, sp, func, arg1)
char *signame;
SIGBLK *sp;
int (*func)();
long arg1;

void starthandlecond(sigfirst) SIGBLK *sigfirst;

void unhandlecond(sigfirst) SIGBLK *sigfirst;

DESCRIPTION

handlecond() sets up a handler for a condition. The user must explicitly allocate the condition block and pass it to the function.

handlecond() establishes function func as the condition handler for the condition signame. arg1 is passed to func at the time of condition signalling. signame "any_other", catches all conditions.

The specified function is called with the actual condition being signalled, with arguments from the latest **handlecond**() call for that function in the given frame and from the call to **raisecond**(). For instance:

int func (signame, arg1, arg2)

char *signame; /* the actual condition being	
	/* signalled */
int arg1;	/* arg1 comes from the handle
	/* call that set up the handler */
int arg2;	/* arg2 comes from the raise call */

If the function returns TRUE (non-zero), it is assumed that the condition has been successfully

handled; otherwise, the condition is signalled farther down the stack.

starthandlecond() sets an initial marker to the current stack frame. It needs to be called before **handlecond**() may be used and the argument needs to be a variable local to the current function.

unhandlecond() needs to be called before a function may call **return** or fall out of the function body. The argument needs to be the same as used for the **starthandlecond**() function.

RETURNS

none

NOTES

Be careful when declaring args to func if they are not long; both args will occupy sizeof(long) bytes in the arglist. If FALSE is returned by a condition handler, and there is an any_other handler in the same block, the any_other handler will be invoked (only once, since it too may return FALSE).

To revert a condition handler simply use NULL as func.

SIGBLK, defined in <schily/sigblk.h>, must be included. **handlecond**() is frequently used with **longjmp**() and **setjmp**().

Eah function which calls **handlecond**() must call **unhandlecond**() before it returns. Otherwise the return will fail or cause a core dump.

BUGS

handlecond() makes the framepointer odd, to mark the current stack frame.

This confuses programs like **adb**(1) and **dbx**(1) because the debuggers scan the stack frame to get the call stack.