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Identification

Inspect condition-handler push-down list
find_condition
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Purpose

It is sometimes useful to be able to examine the contents of the push-down list of handlers for a given condition (see <u>condition</u>, BY.12.04). Procedure find_condition is furnished for this purpose; it operates in the protection ring it is invoked from.

<u>Usage</u>

The calling sequence is

call find_condition (condname, n, proc, flag);

with declarations

dcl condname char(*), (n, flag) fixed bin(17), proc label;

where

<u>condname</u> is the name of the condition whose handler list we wish to examine.

is the number of places down in the list to examine (n = 0 indicates the top of the list)

proc (returned by find condition) is the handler indicated in the \underline{n} th entry in the list for condname, or is the last entry in the list if there are less than $\underline{n} + 1$ entries.

is set either to 1) zero, if <u>proc</u> is indeed the <u>nth</u> entry, or 2) <u>m</u>, where <u>m</u> is the number of places down in the list <u>proc</u> is, if <u>proc</u> is the last entry rather than the <u>nth</u>, or 3) -1, if there is no list.

<u>Implementation</u>

1. Call get_ring_no (BY.12.07) to determine <u>r</u>, the current ring number.

- 2. Call generate ptr (BY.13.02) for <u>condname</u> in <signals_r>. If the pointer returned is null, <u>condname</u> has not been established; set flag = -1 and return.
- 3. Set up for $\underline{n} + 1$ iterations.
- Inspect the back pointer in the current entry for condname. If it is 0, proceed to step 6.
- 5. If \underline{n} + 1 has not been searched, make the back pointer the current pointer and return to step 4. If \underline{n} + 1 has been reached, set \underline{flaq} to 0, set the entry data portion of the current entry into \underline{proc} , and return.
- 6. There are not $\underline{n} + 1$ handlers in the list; set \underline{flag} equal to the current value of the loop index minus 1, put entry into \underline{proc} and return.