

Published: 06/05/67

Identification

Current Ring Number Routine: `get_ring_no`
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Purpose

It is frequently necessary for a procedure to determine the number of the ring in which it is currently operating. The condition-handling mechanism (BD.9.04) in particular needs such information. Procedure `get_ring_no` is furnished by the protection mechanism to satisfy this need.

Usage

The calling sequence is

```
call get_ring_no (n);
```

with argument declared

```
dcl n fixed bin (17);
```

On return from `get_ring_no`, `n` will contain the ring number of the procedure which called `get_ring_no`.

Method

`Get_ring_no` is a ring 0 procedure. When called, it investigates the Stack frame immediately preceding its own: if that frame is a ring-crossing frame (see BD.9.01), the ring number of the caller is copied from the top entry on the Gatekeeper's `<rtn_stk>` into `n` and `get_ring_no` returns; if the preceding frame is not a ring-crossing one, `n` is set to zero and `get_ring_no` returns.